



NEW WORLDS

OLD C. Columbus did not finish the job of discovering new worlds and spoil the game for the rest of us. We can all recall, if we will, more than one occasion upon which we came suddenly into some new world of knowledge, experience or sentiment—when we got a new slant that made everything look different. Sometimes it is a book, a statue, a picture or a word from a chance acquaintance that does the trick. Sometimes it is travel and sometimes it is study. Thousands of people pass the trees out here in Madison Square every day, and it is safe to say that some of those people if you should ask them, would not be quite sure whether or not there are trees in that square and that most of them could not tell you what kinds of trees are there. But let a man begin sketching trees and he immediately sees every tree he passes and he begins to distinguish one kind of tree from another. A whole new world of interest has been opened up. He begins to enjoy the play of light and shade among the foliage, the expression of character in the shape of the tree and the nature of its foliage—he begins to experience a new pleasure. History takes on a new aspect to the man who happens to acquire an old Colonial chair.

The more worlds to which a man has the entrée, the richer and fuller his life may be. *May be*, if he makes use of his opportunities for development. Unfortunately the pleasure derived from new experiences may develop a desire for novelty and change that keeps one peeping in here and there without ever becoming acquainted anywhere. However, most of us probably are too much like the fabled frog that lived in a well and believed that there was nothing beyond the boundaries of his accustomed surroundings.

The man who joins an atelier and begins the systematic study of design enters a world of which he could have had only a very hazy idea. The man who sits down quietly before a picture or a statue in a museum and lets a work of real artistic merit affect him has broadened his view appreciably. Using his head alone won't get a man very far in that kind of exploring. If he keeps fussing with a catalogue or an explanation of the meaning of a work of art, he won't get the message. Art works are meant to affect us by their expressiveness or

their beauty. An intelligent examination of the technique, to discover how the effect is produced may well come after the message of the work has been received and a knowledge of the life of the artist, and of the circumstances which surrounded the creation of the work may well come then. It is more important to sense the bitter cold, the cutting cruelty of the hard particles of snow driven by the wind upon the exhausted, ill-clad, beaten soldiers in Verestchagin's painting, "A Resting Place of Prisoners," than to know the technique by which the effect is produced, without getting the message.

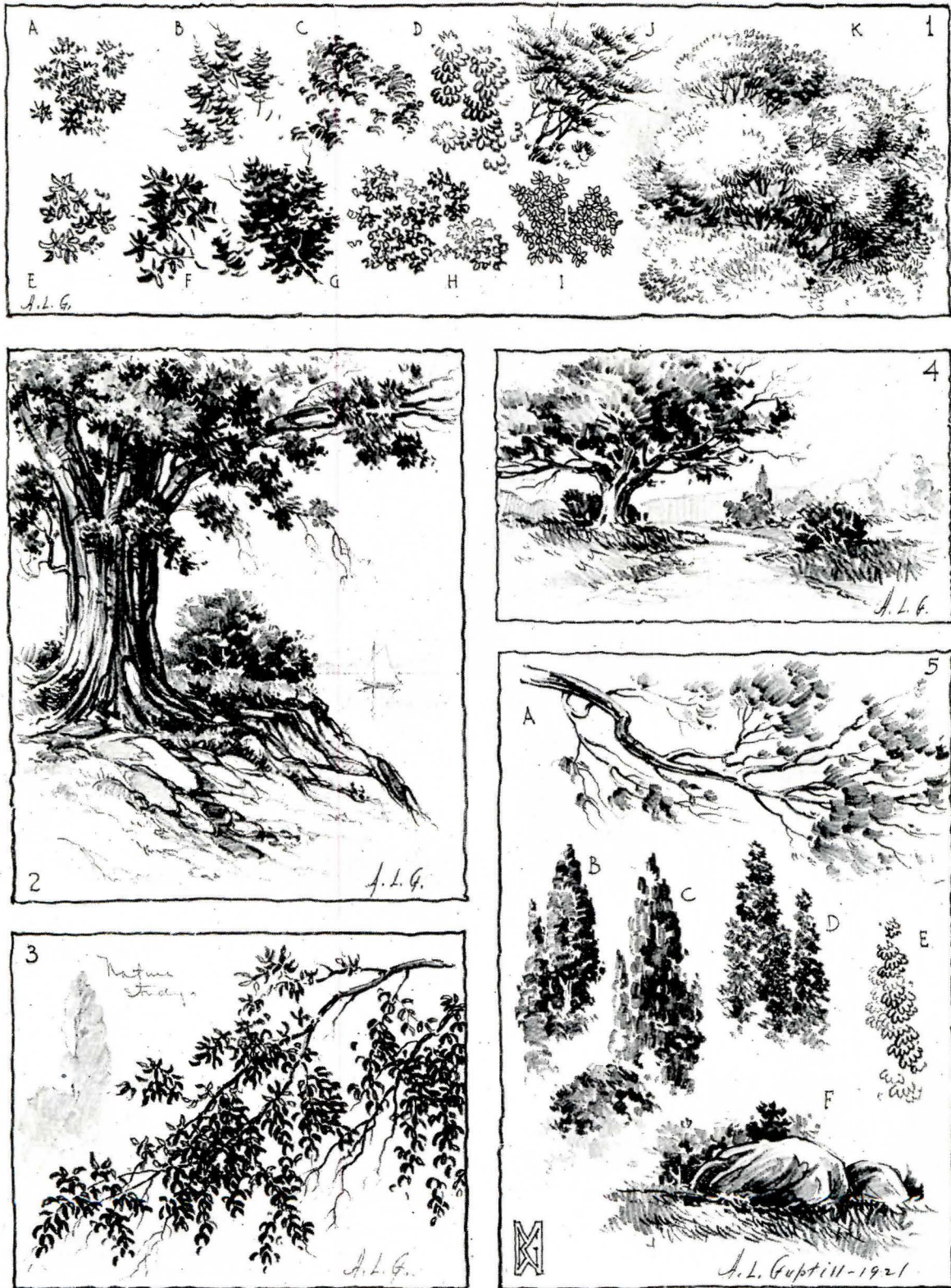
A critic once wrote that certain nudes in an exhibition of paintings looked as though the subjects were victims of the Inquisition, for there were smears of blood red on the knees, elbows and knuckles. If he had stepped back to the proper distance he would have found that those figures had the look of living flesh instead of the appearance of paint—and the color of the thin threads of pure red mingling in the eye with other colors applied in the same way produced the effect. That critic in his self-sufficiency missed an opportunity to broaden out.

In a new world there are many things one does not get the meaning of at first, things that may not appeal to one because of a lack of comprehension—things that are contrary to one's preconceived ideas, to one's traditions or fixed standards of excellence.

It is by learning to comprehend what one does not understand at first that one expands. It is well, however, to be somewhat circumspect in one's exploring, for it is possible to look at chromatic cataclysms, wierd symbolist perversions or dry academic performances until one comes to like them.

It is not only a good idea to look into new worlds, but to get acquainted. There are people who could visit every country on the globe and come back without having developed at all, for they would carry the atmosphere of their own particular little world everywhere, it would envelop them completely and they would see everything through it, dim and distorted. People of that kind can mingle with men all their days and never broaden a bit—they are hidebound. The man with an open, receptive mind and spirit grows day-by-day and finds life keenly interesting.

PENCIL POINTS



Sketching and Rendering in Pencil. Figure 31.

SKETCHING AND RENDERING IN PENCIL, PART XII

BY ARTHUR L. GUPTILL

In this series of illustrated articles the first of which appeared in the August issue of this journal, the technique of pencil sketching and rendering is being taken up step by step, carrying the architectural draftsman or student through a systematic course of study which has been gradually developed and put into practice by Mr. Guptill in his classes at Pratt Institute, Brooklyn, New York City. The illustrations are not merely copy plates, but each is drawn to illustrate some principle of composition or some suggestion for technique given in the text. Although these plates are primarily intended to assist the student in freehand work, they will prove helpful as well to those making pencil renderings of subjects prepared instrumentally.—Ed.

Drawing Trees

IN THE recent articles of this series special attention has been given to the representation of minor portions of both exteriors and interiors of buildings, and it has been pointed out that these small details really are the draftsman's A B C's, which he should learn before attempting large or important compositions.

His alphabet will not be complete, however, until he has added to his knowledge of how to draw these elements of a building itself a fund of information concerning the indication of such accessories as clouds, water, automobiles and other vehicles, animals, people and foliage.

Foliage is especially important as there are comparatively few drawings of architecture which fail to show more or less of it, while in many renderings it occupies a very large and prominent place. (We use a broad meaning of the word here, including under the one general term "foliage" not only masses of leaves but all such forms of plant life as trees, bushes, vines, grass and flowers.) It is, in truth, almost as essential to be able to draw the natural setting for a building, as it is to draw the building itself, and the student should constantly bear in mind; neither should he lose sight of the fact that when sketching foliage, especially trees, he is acquiring, in addition to a knowledge of drawing, certain principles of design directly applicable to architectural work, for there is a very definite analogy in several ways between trees and buildings. As an example of one such similarity, suppose we liken a tree to a tall tower. Just as the tree starts at the ground with a strong and sturdy trunk, and gradually, as it rises in height, becomes more complex and delicate in its parts, so, the tower, springing likewise from a solid base, becomes lighter, also, and its smaller parts more numerous, until, finally, as it meets the sky it terminates in some crowning feature, graceful in proportion and fine in detail. Nor should it be forgotten, when studying foliage, that the student is assimilating a knowledge of plant form which may be of value when designing or drawing ornament, for much architectural ornament is either copied more or less literally from nature or thoroughly conventionalized like the lotus of the Egyptians and the acanthus and anthmion of the Greeks. Again, aside from all aesthetic considerations, the architectural student should not overlook the fact that he can acquire from the study of trees much valuable knowledge of various building and finishing woods.

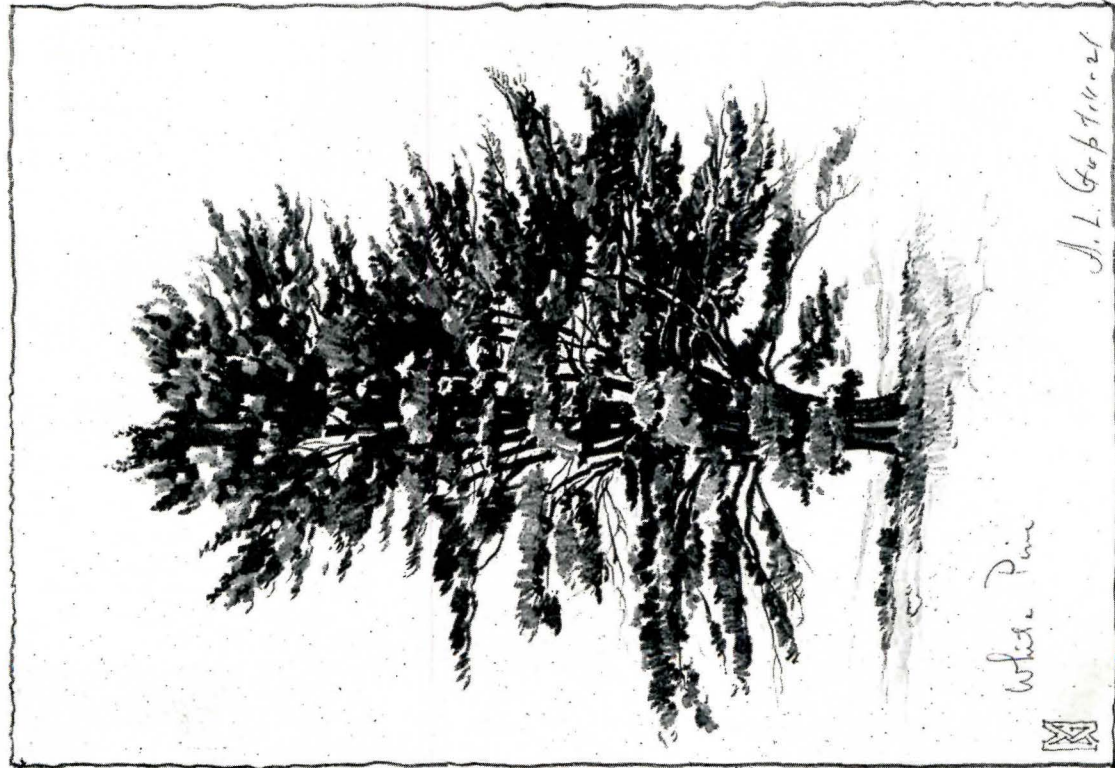
It is because of these numerous advantages to be gained from a study of trees and their foliage, and

because there is, too, so much pleasure to be derived from such a pursuit and especially from the outdoor sketching which is so frequently a part of it, that we are devoting an entire article to its consideration.

First of all, before discussing actual means of representing foliage, it may be well to point out that its frequent employment in drawing is natural, not only because we are accustomed to see buildings in an environment of green, but also because compositions which are otherwise ordinary can be made interesting by its use, even "bad" architecture becoming sometimes so improved in effect as to seem attractive, if the surrounding planting is well designed and rendered, while the beauty of "good" architecture is correspondingly enhanced by a proper setting. Then, too, foliage can probably be put to the greatest variety of uses of any of the accessories, and in the most ways. Trees, for instance, can be shown of any kind and age, thus permitting a wide diversity of shapes and sizes. Bushes and shrubs can be drawn in almost any place and of any reasonable proportion desired by the artist, while vines can be given an equally free treatment without any feeling of their being inappropriate or inharmonious. Of course in some instances it becomes impossible or undesirable to exercise such complete freedom, for if a site for a building has already been selected, having existing foliage worth retaining, it is usually advisable to show with considerable accuracy that part which falls within the range of vision, but even under these or similar conditions many liberties are possible. It is within the artist's province, for example, to decide whether the trees are to be shown with or without leaves. Then if he feels that an improvement in the composition can be obtained by slightly shifting the position of a tree or two, or by adding a few bushes or flowers, the privilege is his. He can vary his effect, also, by his choice of the values used in their representation, employing either light or dark tones as he wishes.

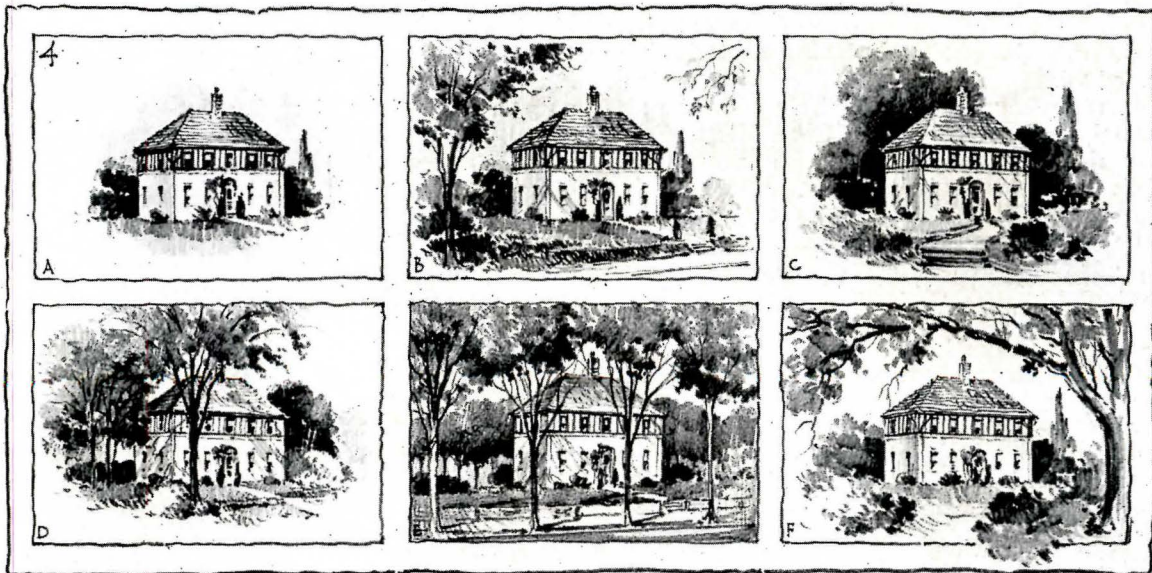
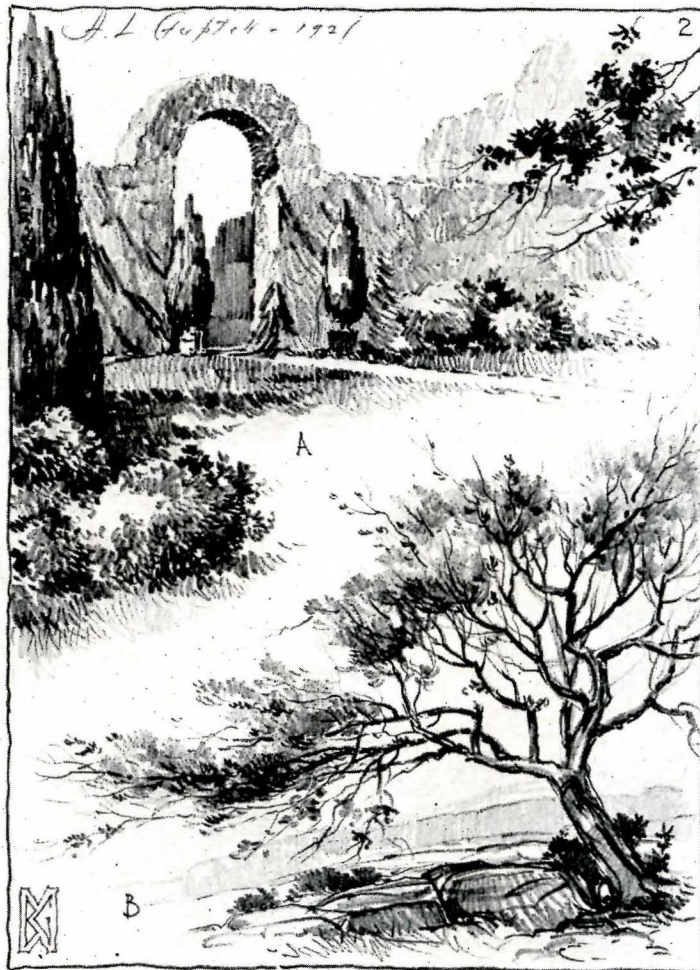
With these facts in mind, consider for a moment the common methods of indicating people and animals and automobiles and note the contrast that such a comparison shows, for though such accessories as these last are undeniably important, especially in renderings of city buildings, it is easy to see that the artist finds greater restrictions when drawing them. To begin with, they must be shown with considerable accuracy of form and size. Whereas trees may vary a number of feet in any dimension, or somewhat in contour, without attracting attention to such variations, let a single figure be too large or small or poorly drawn, or an automobile out of scale, and the fact is usually appar-

PENCIL POINTS



Sketching and Rendering in Pencil. Figure 32.

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Sketching and Rendering in Pencil. Figure 33.

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ent. Foliage is, therefore, often rather less difficult to represent than are these other accessories, yet, mainly because of its varied uses it is frequently of greater value to the student, especially as a means of obtaining satisfactory composition. Warning should be given, however, that in architectural renderings one should never make the foliage so conspicuous that it detracts from the architecture.

It is not our intention to give the impression that the representation of foliage offers no problem, as this is not the case, for to draw it well is, indeed, far from being a simple matter,—in fact, many draughtsmen who have little trouble in rendering a building find foliage a stumbling block. To draw it well one should know it well. Too often beginners try to sketch from memory, forming masses of almost meaningless lines on their paper, trusting to chance that the result will be satisfactory. Perhaps it will, occasionally, but unless one has drawn a great deal from nature or at least from good photographs, his memory will probably play him false or lead him into the common error of drawing all foliage alike, for there are many men who have acquired the knack of indicating one or two typical forms fairly well and who use them over and over again regardless of conditions. Such repetition of course produces inexcusable monotony.

Whereas it is from such outdoor sketching and drawing from photographs as we have just mentioned that one is able to acquire most easily a knowledge of foliage representation, it is suggested that as a valuable preliminary preparation the student should study his botany, and read, also, some of the many excellent books devoted mainly to the consideration of trees. (There are plenty such, so it seems unnecessary to call attention to any particular ones here, though for a concise volume on the subject, F. Schuyler Mathews' "Field Book of American Trees and Shrubs" is excellent, especially from the draughtsman's standpoint, as it is fully illustrated with pen, crayon and color reproductions. Then there are some written entirely from the artist's standpoint, among which Rex Vicat Cole's "The Artistic Anatomy of Trees" is an excellent example, for although it is an English publication dealing mainly with trees native to England, it nevertheless offers many suggestions applicable to the representation of our own trees.) A perusal of such volumes will not only familiarize one with the names and leading characteristics of the more common varieties, and train him in the laws that govern their growth, but should, also, strengthen his love and appreciation of the beautiful in nature. It is by no means necessary to learn all the scientific terms employed by the botanist or to memorize more than a few of the essential facts, but it is advantageous to gain enough of a knowledge to enable one to answer such questions as the following,—What are "evergreen" trees? What are "deciduous" trees? Name some characteristics of the Pine family;—of the Maple family;—of the Birch;—of the Beech.

Do Elms grow in Ohio? Are Hemlocks found in Kentucky? Name five trees that are tall and

pointed. Name five that are short and wide-spreading. Questions like these may seem unrelated to pencil sketching, but they really are not, for the architectural delineator may be called upon to make sketches for a building in Florida or Maine or California or in some part of the country which he has never visited, using trees of an appropriate kind and shape. Unless he acquires such a knowledge, therefore, or knows where he can easily secure the information when it is needed, he may make absurd errors.

It is, of course, especially important for the artist to be familiar with the foliage in his own vicinity, so as soon as he has gained a considerable amount of this "book" lore he is ready to visit a park or the country, sketchbook in hand, looking for actual examples to illustrate the things which he has read. Before starting to draw, it is well to take a walk among the trees, comparing one with another, observing the shape of the general mass of each, analyzing, also, its skeleton of trunk, limbs, branches and twigs. Search, meanwhile, for a suitable subject for the first sketch. This may be a whole tree, or simply some portion of one, or perhaps a pleasing group of several. In any case the view-finder will be of help in selecting an interesting composition.

At this point it may be well to offer a few practical hints, and one is that the best time of day for sketching is usually the late afternoon, for the rays of the sun are then so slanted as to produce an excellent contrast of light and shade and shadow. Needless to say, however, there is no time between dawn and dark when one cannot sketch to advantage. The student is wise to sit in the shade, if this is possible, or at least to keep the sunlight from falling directly on his paper, for a bright glare will not only prove trying to the eyes but may prevent a correct judgment of the values, especially if one is accustomed to spending the greater portion of his time indoors. In order to offset to some measure the brilliancy of the outdoor light, some artists use gray or straw-colored paper for sketching purposes, which, besides having less tendency to cause eye strain, also permits a pleasing use of white pencil or chalk for picking out some of the high lights. More will be said about such tinted paper in another article. As to the size of paper, anything will do, some of the pocket sketch-books being very convenient. The objection to the smaller ones is that they prohibit freedom of movement of the arm and wrist and thus force one into unnecessary difficulties. The notebook proportion of 8 in. by 10½ in., which we have previously recommended, seems practical, and some artists prefer still larger sheets. As the main objects of outdoor sketching is to record facts in a direct and forceful manner, one should not use many grades of pencils, for this is no time to worry over technique. Have several pencils, however, of each selected grade for they wear down rather quickly, and be sure to bring a knife as they will need frequent pointing.

Now as soon as the subject for a sketch is

(Continued on page 40)

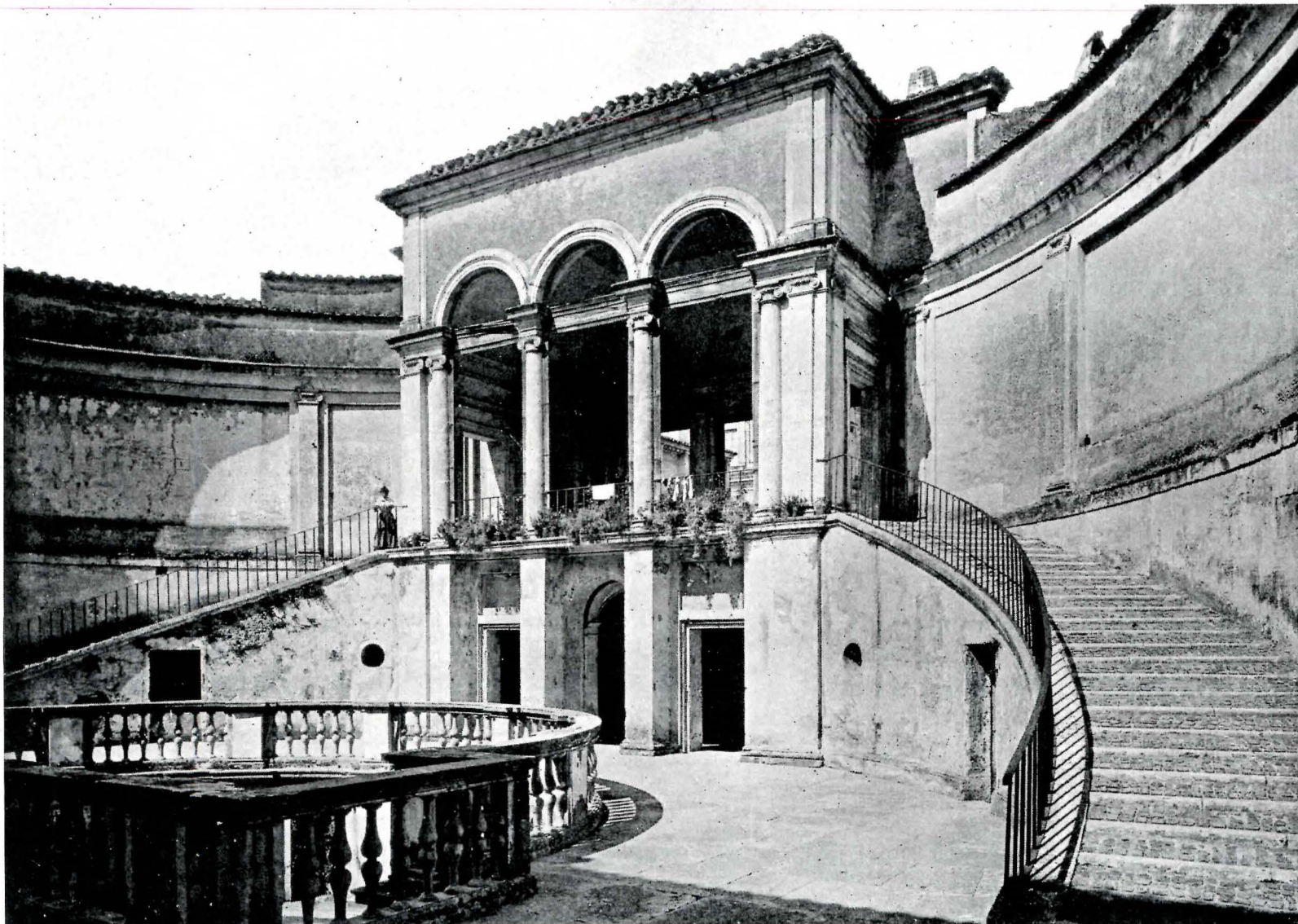


FRAGMENTS FOUND AT POMPEII

RESTORATIONS BY E. PAULIN

FROM H. D'ESPOUY'S "FRAGMENTS D'ARCHITECTURE ANTIQUE"

The fragments of diverse character from Pompeii shown on the other side of this sheet from restorations by E. Paulin combine a lively, interesting quality with refinement of design. The capital particularly shows the combination of these qualities. The figures in the mosaic, though very free in drawing, are kept in the plane of the material by their flat treatment.



NORTH-WEST SIDE OF THE REAR COURT, VILLA DI PAPA GIULIO

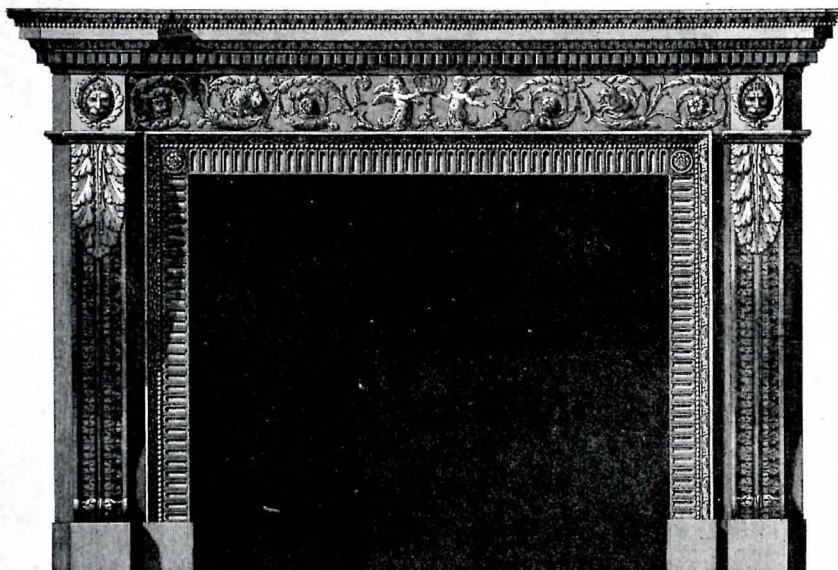
FROM STRACK'S, "BAUDENKMAELER ROMS"

The illustration on the opposite side of this page shows a part of the elevation of a semi-circular loggia of the second court of the Villa di Papa Giulio.

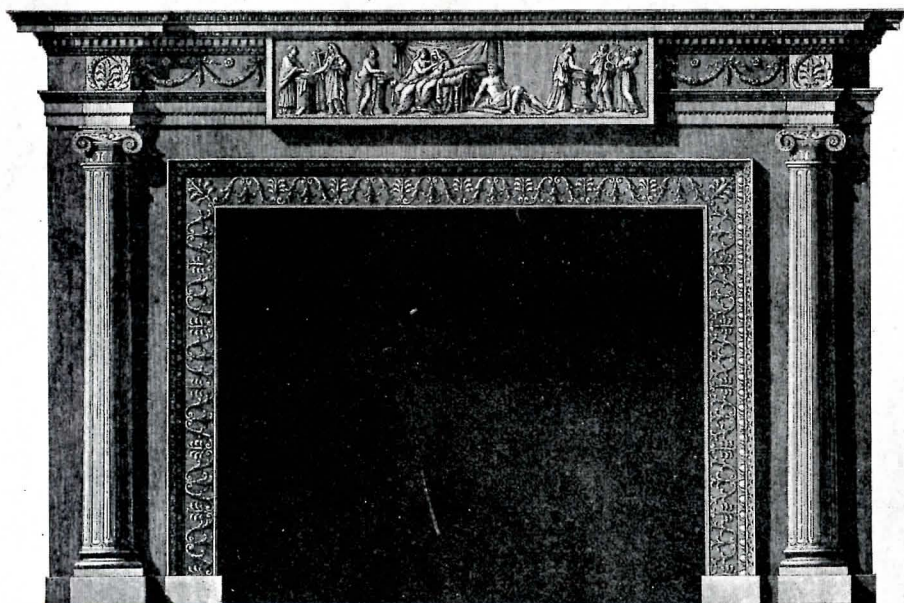
How much of the preliminary design of Vasari is incorporated in this work is not definitely known. Vignola was responsible for most of it. Ammanati assisted with some of the detail of the garden. Pope Julius took an exceedingly great interest in the design and construction of this villa, which affords many interesting suggestions.

Plate XXVII.

*Design of a Chimney Piece executed in the Great Saloon of the Queen's House
 Le plan d'une cheminée exécuté dans le grand salon de la Reine*



*A Chimney Piece designed for one of the Rooms in St James's Palace
 Un plan d'une cheminée pour une des Chambres dans le Palais de St James*



St. James - Palace 1742

Scale of 10 Feet

St. James's Palace

DESIGNS FOR CHIMNEY PIECES BY ROBERT ADAM
 FROM "THE DECORATIVE WORK OF ROBERT AND JAMES ADAM"

The two designs for chimney-pieces shown on the other side of this sheet are admirable examples of the work of Robert Adam. The upper drawing is the design for a chimney-piece executed in the great Saloon of the Queen's House. On the lower part of the plate is shown the chimney-piece designed for one of the rooms in St. James's Palace.



FIGURE STUDY BY BARRY FAULKNER, FOR ONE OF HIS MURAL PAINTINGS FOR THE CUNARD BUILDING, NEW YORK CITY

On the other side of this sheet is reproduced the pencil study from life for a figure in one of Mr. Barry Faulkner's mural paintings in the new Cunard Building, New York City, Benjamin Wistar Morris, Architect, Carrère & Hastings, Consulting Architects. This reproduction was made through the courtesy of Mr. Morris, to whom Mr. Faulkner presented the drawing, as indicated by the autographed dedication by Mr. Faulkner in pencil near the bottom of the drawing. It is a remarkably fine example of technique in drawing from life.

THE STUDY OF ARCHITECTURAL DESIGN

WITH SPECIAL REFERENCE TO THE PROGRAM OF THE BEAUX-ARTS INSTITUTE OF DESIGN

THE "ANALYTIQUE" OR ORDER PROBLEM. PART VI.

Passing to Ink

BY JOHN F. HARBESON

In this series of articles, which began in the January issue, Mr. Harbeson is explaining the method of working and how to get the greatest benefit in following the program of The Beaux-Arts Institute of Design. This series is designed to cover matters of method and leave the time of the instructor and of the student free for the individual problem. It is not intended as a substitute for personal instruction and criticism.

WHEN the studies are completed, there are two ways in which the design may be put on the final sheet. The work may be drawn anew on the sheet, starting with the main axes and making use of "ticking-strips" of paper to transfer a number of dimensions quickly; or a "rubbing study" may be made on tracing paper, which is then turned face down on the final sheet, and the pencil lines transferred to the latter by rubbing with a spoon or other rounded object through a piece of tracing cloth, taking care to rub always in the direction of the grain of the tracing cloth (parallel to the selvage), never against it, and lifting this tracing cloth from place to place on the tracing as successive parts are transferred, rather than sliding or dragging it across the surface. Of course both methods may be used on the same drawing—drawing the details directly and rubbing the small scale drawings, or vice versa.

Each method has some advantages. The direct drawing is more accurate, and is therefore used frequently for competition work where careful drawing is essential; it is often used also by clever men in going directly to a final sheet from a very early study when time is short. This is satisfactory if all real difficulties of design have been foreseen and solved in the first sketches, and if the author has a good working vocabulary of architectural forms.

For most projet work, however, the rubbing study is a time-saving device, for several

reasons: the pencil slides more quickly over tracing paper; the dimensions having largely been fixed, there is necessary no tedious laying off of measurements; and studies of different parts may be slipped under the rubbing study and drawn there in final shape.

Some parts of the work need be shown only by axis-lines on the rubbing study, and drawn directly in ink on the final sheet, such as all ornamentation of mouldings at small scale, dentils, modillions, etc.

When transferring, the rubbing study should not be pasted on the final sheet if that necessitates putting paste where there is later to be drawing or rendering, as paste rots the paper and usually causes it to crack when washes are run over it. The rubbing study may be held down by pasting on it the ends of strips of paper, the other ends of which are pasted at the edge of the board, as in Figure 61a, or by pasting strips of paper, as in Figure 61b, in which case the rubbing study may be moistened with a sponge and allowed to pull itself tight by shrinkage before rubbing. The work of rubbing should be firm enough to transfer the lines sharply—not so hard as to cause the rubbing study to buckle and thus blur the lines.

The actual inking-in may be called a mechanical process but the manner in which it is done may make or unmake a problem, other things being equal. The use of black ink is usually confined to inking the section line of plan and

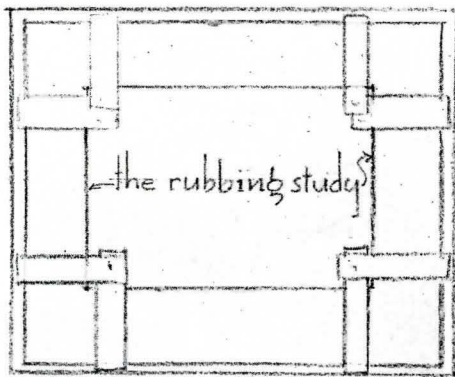


Figure 61a.

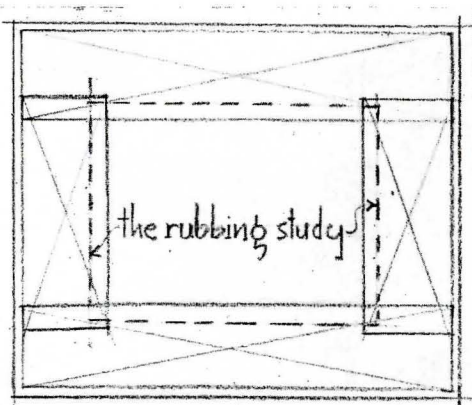


Figure 61b.

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section—the outline of the constructed form. If the plan is at small scale, and the points of support small, they are usually entirely blackened in—if they are large, the edge is a black line and this is filled in with a wash during rendering. In an analytique black ink may also be used to outline the several details, or to separate the “frame” of details from the small scale elevation within. If a rendering is not entirely successful and the forms are confused, and lack of

time prevents a more complete rendering, this outlining will clarify the drawing and make it readable, and if neatly done is not unpleasant.

For the rest of the inking-in—by far the larger part—the ink is diluted with water. Even a slight dilution changes the nature of the ink, and though it may look fairly black, it can be rubbed down or rubbed out with an “emerald” or “ruby” rubber, so that portions of a drawing may be softened, or the whole drawing may be softened by a slight sponging with plenty of water. The diluted ink line should be fairly dark, for it is always possible to rub or sponge it to a lighter tone. If a drawing is made with a too-diluted ink, it is frequently lost entirely by a few washes of rendering, and it then becomes necessary to redraw portions, or to render very carefully, taking great pains at edges and contours; unfortunately there usually is not sufficient time left to the rendering to allow this.

Different values of diluted ink may be used to advantage: where an ornamented portion is filled with lines, for instance, such as an acanthus scroll frieze, it is frequently better to use a somewhat lighter ink, rather than to have to rub it down after inking. When stone joints are inked in—frequently they can just as well be drawn with a hard pencil after the drawing has been cleaned down—a very much more diluted ink should be used. This may be said also when shadows are inked in, for shadows should count rather as areas of tone than as patterns of line.

The actual line should

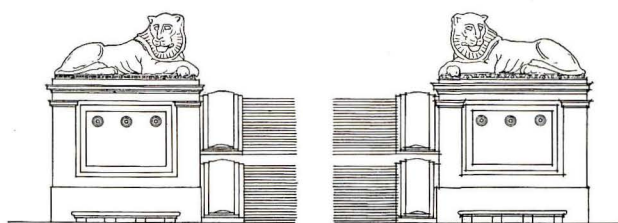


Figure 62a.

Figure 62b.

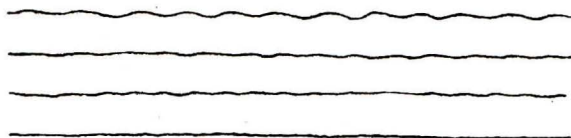


Figure 63.

be solid and “fat” enough to avoid any appearance of wiriness; it should begin and end firmly, and the meeting of two lines should be neatly made, as lines are used in architectural drawings to bound solid surfaces, Figure 62a. Usually the so-called “snapping” of lines at their intersections as in Figure 62b, gives a papery effect, and the little useless ends of the lines are very ugly in a carefully rendered drawing. This of course does not apply to sketch problems, where

time is too short to make a careful drawing, and the snappiness of lines gives force and vigor to work which depends much more on its lines, much less on its rendering than a projet problem.

It is very important for a draftsman to ink in freehand lines easily and with assurance: there is no trick or difficulty about this—it is simply a matter of practice, given a good drawing in pencil. In principle, however, it is well to remember that a freehand line should be “freehand,” and not stiff and mechanical, and it is better to train the hand to use a wave motion, swinging above and below the line, crossing at regular intervals. Exaggerated, this is shown in Figure 63. As the draftsman gains control over his hand the oscillations become invisible to the naked eye, but a sense of vibration is present which gives freedom and character to lines so drawn.



Figure 65.

The less able a draftsman is to draw freehand well to express projections of rounded mouldings, and free ornament, the more he should introduce such work in his problems. If persistent, he cannot fail to learn how to draw well. The important thing is to make the eye see the mistakes, the faults, in one's drawing; if a fault is understood it can be conquered. One cannot do good architecture without these freehand forms; they are used even in the simplest architecture, for the moulded profiles of column base, entablature or string courses. Profiles drawn with a compass result in hard and cheap looking work.

PENCIL POINTS

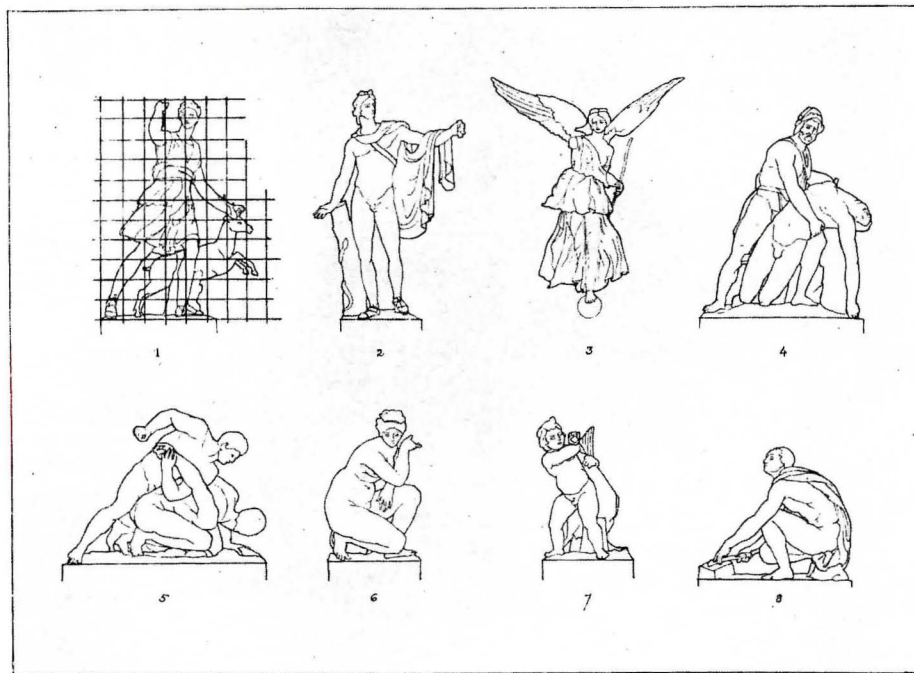


Figure 64.

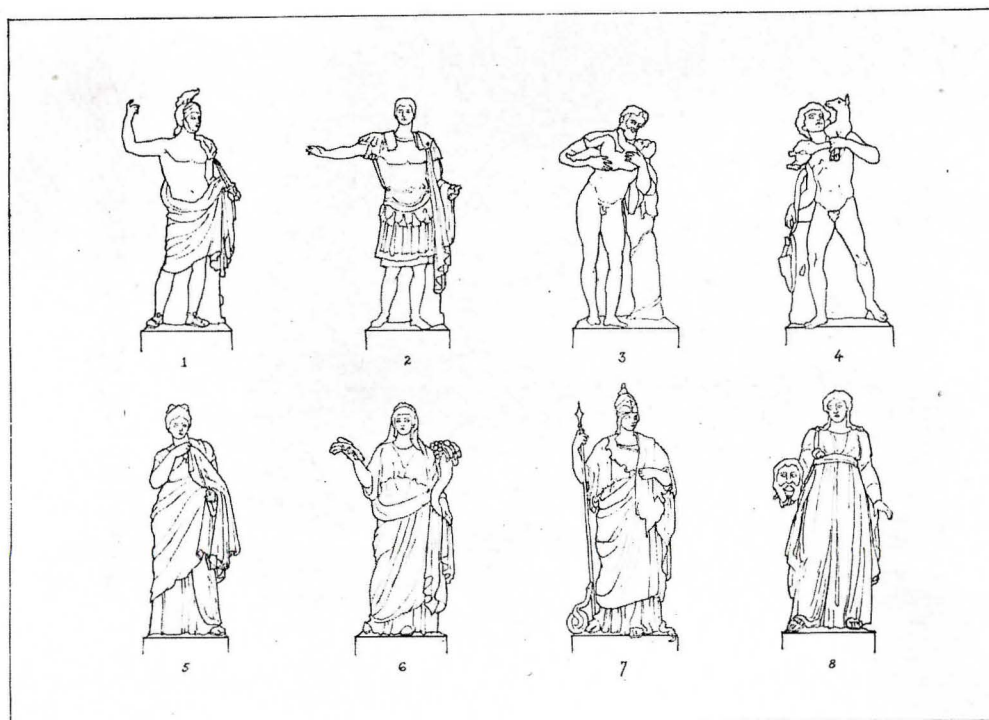


Figure 66.

PENCIL POINTS

Those who find it difficult to draw well a statue, for instance, may use the method of "squares": Divide the height of the statue chosen into an equal number of parts—use any convenient division on your scale, such as $\frac{1}{8}$, $\frac{1}{4}$ or $\frac{1}{2}$ inch,—and then by means of a 45° diagonal, draw lines at right angles, forming a series of squares, as in Figure 64, upper left hand corner. Now, by dividing the height the statue is to have on your finished drawing into the same number of parts, and forming squares in the same way, the figure may easily be drawn by taking each square in turn and drawing the lines on your drawing that occur within this square on the document. See Figure 65.

In Figure 64 are shown a number of statues at small scale, taken from the small book of Gromort on architectural indication. "Petit Recueil d'Eléments Décoratifs." Figures 66, 67, 68 and 69, from the same book, show a number of vases, cartouches, balustrades and fountains, which the student will find useful in completing his drawing. All the examples are from existing work, are exceedingly well drawn, and simple enough in indication to be used on small scale work.

If in inking a drawing a blunder has been made, a profile is poor, or a piece of freehand is not well done, do not be afraid to rub it out, using the emerald or ruby rubber and an erasing shield, and rubbing lightly: it is better to spoil the surface of the paper than allow an ugly piece of work to pass with your name on it.

I might say here something of lettering: good lettering improves a problem; if it is not well done—which means well spaced, well drawn letters of pleasing shape so applied as to aid the general composition—it is far better omitted. Granted one can judge between good and bad lettering, it is simply a problem of patience and usually resolves itself into a question of time: lettering should not be considered if there is not time to do it well. For the smaller sizes of lettering, perhaps the method which gives the best results in least time, is to seek in a

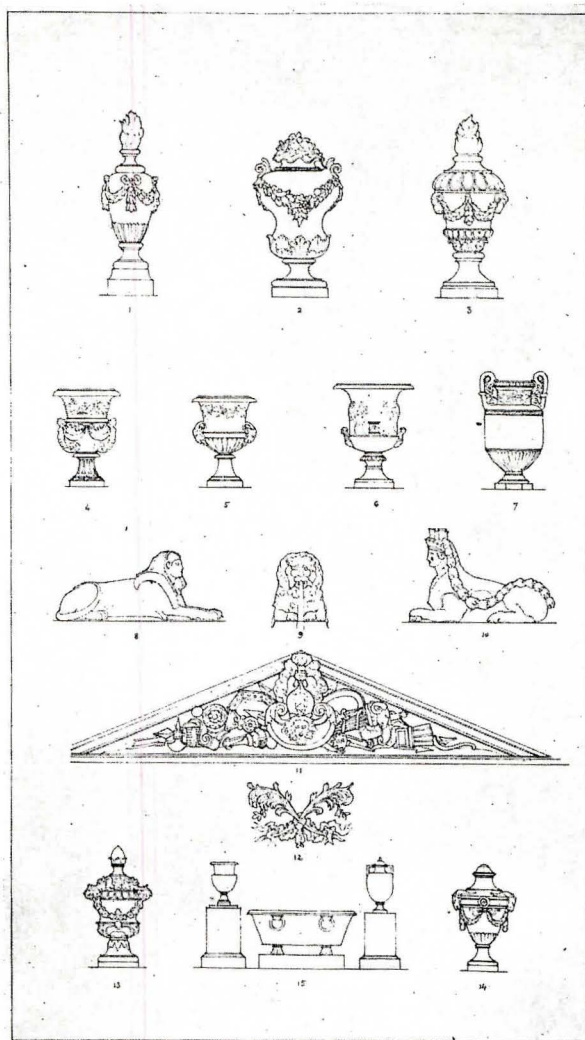


Figure 67.

book of alphabets, such as Brown's "Letters and Lettering," for letters of the proper size, and simply trace over them on a piece of tracing paper on which have been drawn guide lines—top and bottom. In this tracing the spacing of the model should be utilized as much as the forms of the individual letters.

When the drawing is completely inked in, it should be thoroughly cleaned,—first rubbing with a soft rubber or art gum, lightly, so as not to injure the surface of the paper, and then with a sponge and plenty of water, sopping the sponge on the paper rather than rubbing it across the surface for the reason just given. When dry, the shadows should be drawn with a well pointed pencil, and the stone joints drawn lightly in pencil if they have not been already done in ink. Care should be taken to avoid dirtying the paper, and the hands should not be allowed to touch it, as any body-oil that reaches the paper causes streaks

and spots in the rendering washes, especially if India ink be used.

The shadows *must* be drawn correctly, or sufficiently so to give the appearance of correctness. Many men fail of "mention" because the shadows are wrong, and there is no excuse for this when such good and inexpensive books as McGoodwin's and Millard's may be secured on this subject. The reason that accurate shadows are considered of such importance is that in the geometrical elevation it is the shadows that explain the forms.

The "entourage," trees, bushes, etc., foregrounds and backgrounds, and figures, are frequently drawn at this time and left in pencil, studies being first made on tracing paper, with charcoal or soft pencil, over the scale drawing. The first requisite of these accessories is that they be well composed and well drawn; it is better, too, that they be somewhat conventional, rather than realistic, as the drawing is necessarily conventional. If there is not time to draw them well, they should be omitted, and a simple graded wash substituted; it is foolish to spend several weeks in studying an elevation, and

PENCIL POINTS

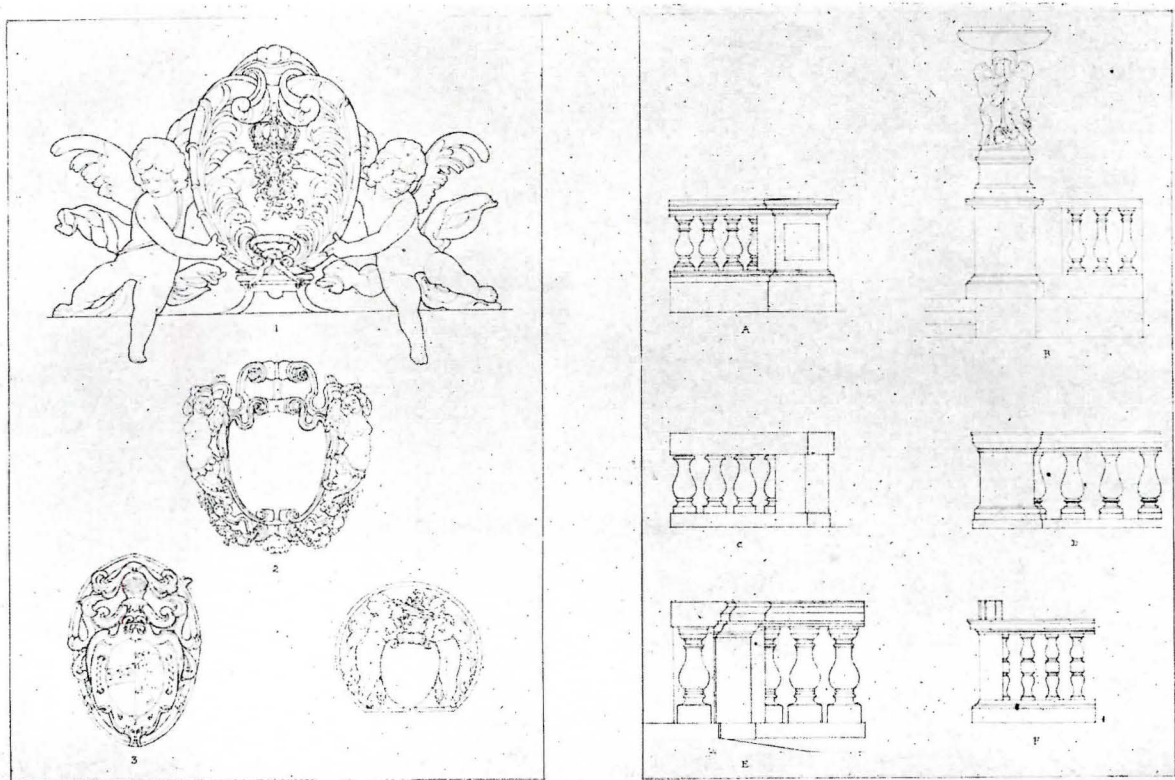


Figure 68.

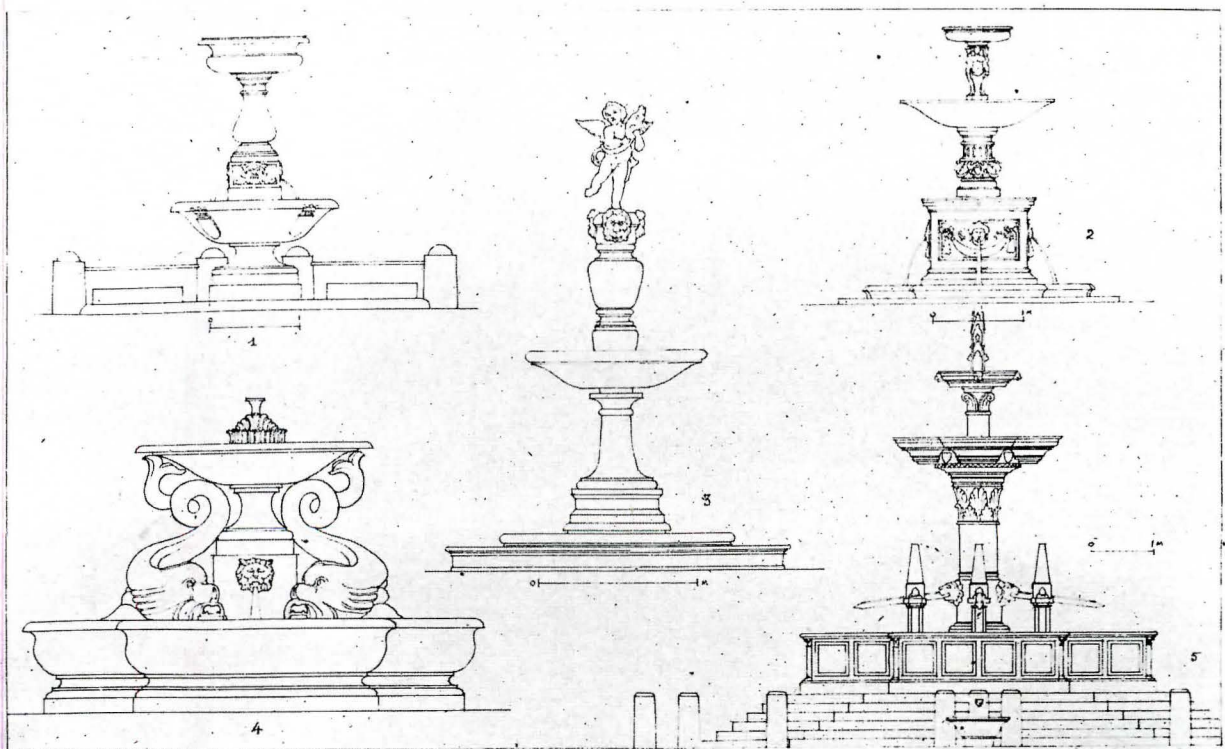


Figure 69.

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then, a few minutes before starting the rendering, to sketch hastily distorted perspectives, ill shaped trees and mountains, which entirely ruin the elevation. It is well for the beginner to use documents for such accessories—almost any magazine contains photographs of good examples. In Figure 70 are shown some trees and bushes conventionally drawn.

In using perspective for foregrounds the horizon should be placed at the height of a man drawn to scale, and the vanishing point found on this line as in Figure 71a. When this is too sharp—if paths are at the extreme side, for instance, it is well to use two vanishing points, equidistant from the center, Figure 71b.

GIACOMO BAROZZI DA VIGNOLA.

VIGNOLA, whose real name was Giacomo Barozzi, was born October 1, 1507, died in 1573. A profound student of architecture, an archaeologist and a writer of note, he has left to posterity, besides his writings, a great many architectural works in various parts of Italy. He worked first in Bologna, later in Rome, and after Michaelangelo, was the superintendent of construction of St. Peter's. His "Five Orders," printed in 1563, was for some two hundred years the canon on architecture.

He was born in the town of Vignola, to which his father, Clementi Barozzi, a Milanese gentleman, had retired in consequence of civil discords at Milan. His mother was German by birth. Early as a youth, he studied painting at Bologna, but not doing well, he turned his attention to perspective, and, at length, collected the rules on that subject in a treatise. He studied architecture at the same time, and seeing that making drawings and studying Vitruvius were not the only requisites in the education of an architect, he went to Rome and measured almost all of the valuable remains of antiquity in that city. From this study he produced that treatise of his latter days on the five orders of architecture, which has become

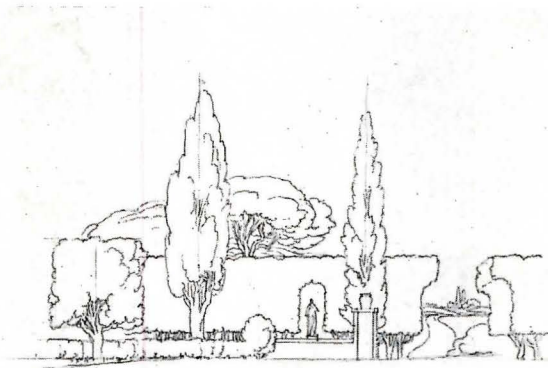


Figure 70.

the alphabet of architects. He did some edifices in Bologna, Rome and various parts of Italy. Upon his return to Rome, Giorgio Vasari presented him to Julius III. This pontiff, who had known Vignola at Bologna, when legate to that city, made him his architect, gave him the plans of construction of the aqueduct and water ways of Trevi, and ordered him to build him his villa, without the Porta del

Popolo, which was called after the name of the pope, the Villa di Papa Giulio. This was in 1550. The general arrangement is attributed to Michaelangelo. The building of this palace and the laying out of its gardens were daily occupations of Pope Julius III. He took the greatest interest in all that was done.

At the Villa di Papa Giulio, Ammannati did the architectural screen between the grotto and the gardens. Entering underneath the fine archway, we come to an oblong court bounded upon one side by Vignola's charming circular open loggia, painted with the frescoes of Zuccherò. This villa, fortunately, has not been turned into a museum. The entrance was originally meant to be through a court. A fine open loggia was added, however, and now divides the two courts, allowing a vista through it of a small square parterre, where a little fountain sends up a silvery jet of sparkling water. From the second courtyard, or farther court, one descends to a semicircular grotto enclosed within a well-proportioned balustrade; here the murmur of rippling water is ever present, tiny cascades descend over rocks and moss and finally flow into a miniature canal where gold and silver fish dart ceaselessly about. There are few so wholly satisfactory examples of garden architecture in Italy as this delightful grotto.

Hardly was Julius III on the papal throne when he put his pet idea into execution and the villa site was attained. Vasari and Michaelangelo were asked early. Vasari had trouble with the pope and Michaelangelo was very busy. Cardinal Allesandro and perhaps Vasari suggested
(Continued on page 42)

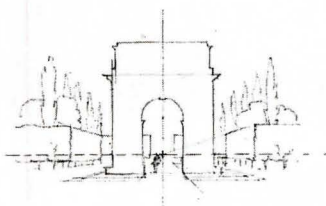


Figure 71a.

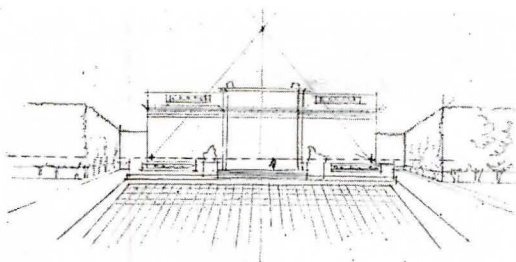


Figure 71b.



ANTIQUE FRAGMENTS

FROM H. D'ESPOUY'S "FRAGMENTS D'ARCHITECTURE ANTIQUE"

Figure 24. "Architectural Details." See text beginning on page 27.

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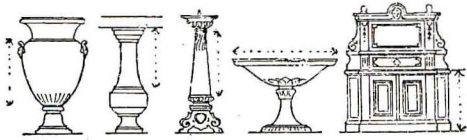


Figure 9.

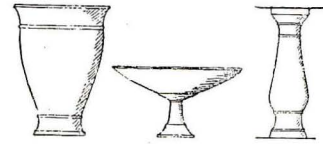


Figure 13.

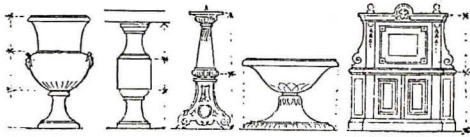


Figure 10.

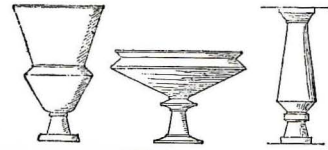


Figure 14.

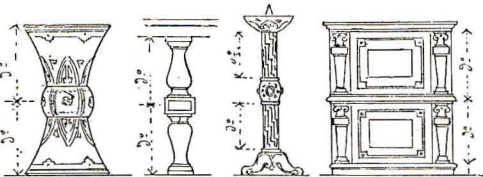


Figure 11.



Figure 15.

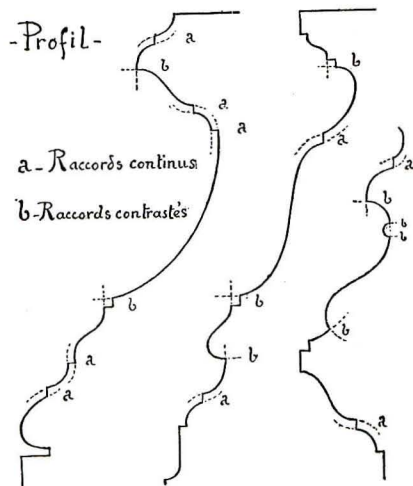


Figure 12.

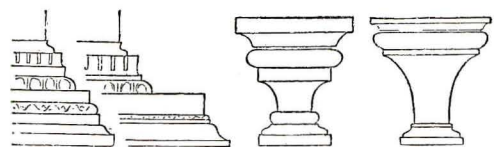


Figure 16.

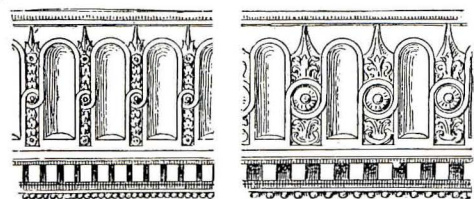


Figure 19.

Architectural Detail, See Text on page 27.

ARCHITECTURAL DETAIL PART III

BY JOHN VREDENBURGH VAN PELT

This is the third instalment of an article in which Mr. John Vredenburg Van Pelt, formerly Professor in Charge of the College of Architecture, Cornell University, Architecte Diplômé par le Gouvernement Français, and author of "Essentials of Composition," will discuss the designing of good architectural detail and point out the means by which the ability to produce good detail can be developed. Reproductions of detail drawings from some of the best architectural offices will accompany this article and the publication of this series of drawings will be continued after this discussion of the subject has been completed—making a valuable feature of this journal indefinitely.

WE HAVE said that contrast is one of the important sources of satisfaction in composition. Let us examine this in detail. Figures 9 and 10 show similar bits of ornament or detail, well proportioned in the former, badly in the latter. Not only is lack of contrast between the elements disagreeable; but the omission of a dominant element makes each of the small compositions of Figure 10 uninteresting. To put this into concise terms: "When unlike elements are juxtaposed they should differ markedly."

Figure 11 shows the juxtaposition of similar elements. In such an event they must be exactly alike in size, and this introduces an axis of symmetry. I am not entirely convinced by the candelabrum (third from left) as the definitely different requirements of base and crowning member, the strong suggestion of verticality, make of a horizontal symmetry something foreign. My objection comes from an association of inharmonious ideas, not from the form itself. We shall study this other type of fault later.

Figure 12 explains how difference of direction may be made just as interesting as difference of size. If the initial direction is to be continued, it should be by a tangential curve or by a parallel, when a short normal gives strength, as at (a) in the profiles shown. If the direction of two elements is changed, at the point where they touch, they should contrast as definitely as possible, be at right angles one to the other.

Notice that where the successive elements fail to contrast in size, the profile becomes less interesting.

Furthermore the elements of profile should contrast in character. If all the curves are very flat or if straight lines are used continuously, the effect will be as bad as though very full curves with no stoppage between them, were predominant. Figures 13, 14 and 15, showing the same three utensils, are all disagreeable; yet satisfactory designs might have been obtained by taking an element from each figure.

It is astonishing to find architects of wide reputation turning out work that violates this very simple, if very fundamental law. There is a flat-chested, putty-like baluster that has had considerable vogue, and because some of the old Georgian or more ignorant Colonial mantel makers turned out entablatures with weak outlines, some of our modern Colonialists have shown sufficient lack of discrim-

ination to do likewise. The second half of Figure 16 will recall the latter. Other customary mistakes are the crossettes that are too large for the motive and the border that is too wide for its panel. Figure 17. Figure 18 shows Flemish iron work that presents the defect of too much broken line and too violently repeated contrast. The central latch plated and corner straps afford only slight relief, proving effectively that the same amount of interest in all parts of a de-



Figure 25. Restoration by Denuelle of Pompeiian Painted Decoration. From H. D'Espouy's "Fragments d'Architecture Antique."

Note. — Figures 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 23, 27, and 28 are reproduced from H. Mayeux's "La Composition Décorative."

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sign makes a grey of the whole.

The requirement of contrast applies to the succession of separate bits of detail as well as to the component parts of each bit. Figure 19 is an example. The design might have been equally good had the ornamented portion been wide and the flute narrow.

Avoid the combined use of motives of different expression that do not contrast in line. In the left hand portion of Figure 20 the lines of cornucopias in the first panel are exactly repeated by dolphins in the second and this is true of the other elements. Either the elements should repeat or the lines of the composition of each panel should be different. At the right of this figure the curve

of the shield and head in the panel are repeated unpleasantly by the garland and cluster immediately below it. In Figure 21 the repetition between the similarly curving outer and inner border motives at the left is less interesting than the contrast between the same curves of the outer border and the straight lines of the fret shown on the right. Had the fret been rectangular it might have been more pleasing.

If the elements contrast, so also should the corresponding lines of the main composition. The mirror shown on the left of Figure 22 is agreeably composed on only one, a vertical, axis and top and bottom are dissimilar in detail; that in the middle of the figure is bad because the details are unlike at top and bottom while the general outline and mass composition suggests a

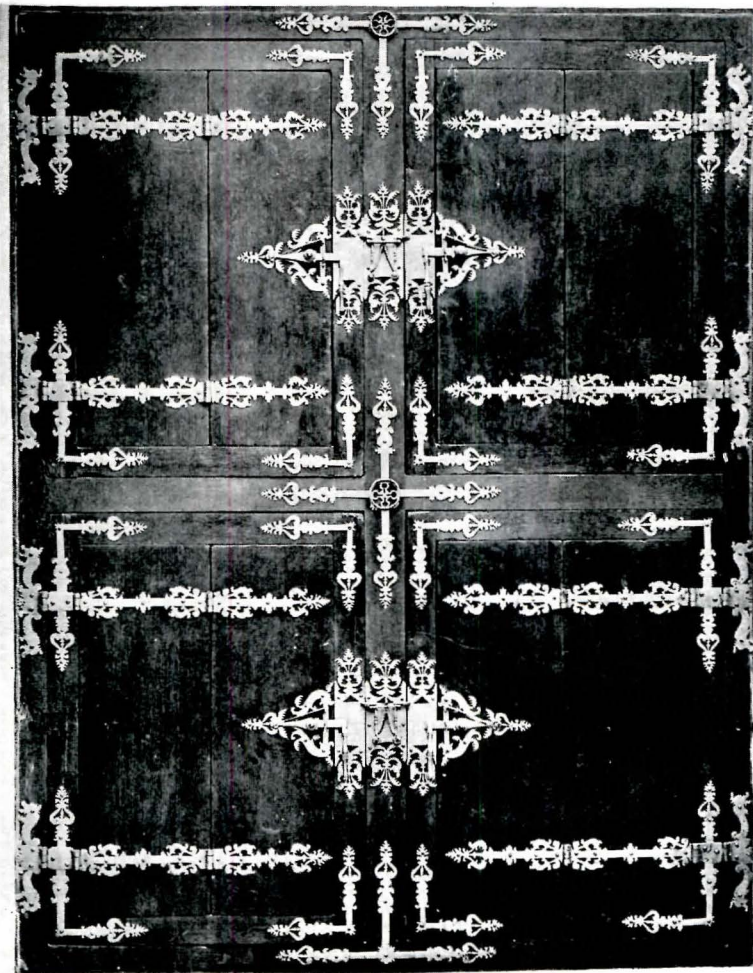


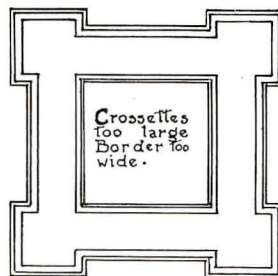
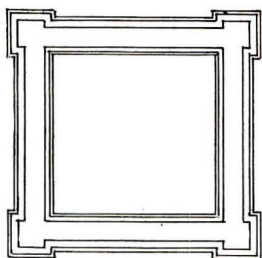
Figure 18. Cabinet Shutters of Oak Having Ornamental Iron Hinges. XVI Century. From "Documents de l'Art dans les Pays-Bas du X au XVIII Siècle," by J. J. Van Ysendyck.

horizontal axis of symmetry; that on the right is definitely symmetrical about two axes and as a design is good, although the slight shock of verticality not met would be a possible source of unpleasantness if it were hung on a wall.

It is not sufficient that the silhouettes of sculptured motives contrast in direction, size and kind, they must also contrast in relief and in the shadow they cast. Notice how evident this is in Figure 23. Italian Renaissance ornament is vastly superior to that of the French Renaissance because of the beautiful play of light and shade between the projecting flower and leaf

forms, always to be found in the former and lacking in the jig-saw detail of the latter. The same difference of expression may be seen between Greek and Roman work of the better period, Figure 24, page 25, and the decadence of Rome.

An extension of the law of contrast may be made with advantage in the treatment of backgrounds. It is evident that the surface allotted to the background of an ornament or figure may be greater than that allotted to the subject itself, as in Greek vases, the delicate Pompeiian frescoes, the arabesques of the Italian Renaissance, and some of the refined motives of Louis XVI, Empire and Adam, Figure 25. It may also be less extensive than the subject, the latter filling almost the entire space, as in many of the Louis XIV examples,



Crosses too large
Border too wide.

Figure 17.

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Figure 26, where the effort to produce an impression of richness and brilliancy must stop short of heaviness and confusion. It is better to follow one of these courses unless the subject and background are identical, Figure 27, or unless the pattern itself is to be a background, such as the diaper of a brocade, damask or inconspicuous wallpaper. In the Boulle inlays the extent of the background usually predominated in the section of the design where it retained its role, Figure 28.

The value of "contrast" is derived from two things: *a*, relief experienced by the human organism when, for the sufficient exercise of some part of the perceptive faculty, is substituted the exercise of some other part; exercise of a different kind; some change that develops activity in a new direction and permits rest in the original one; *b*, the fact that in man, each impression is intensified when there is a closely associated impression of opposite kind. These are purely physiological facts, and although they vary in degree in different individuals they exist markedly for all normal persons.

There are those whose perceptions are sub-normal, and some who have practically no perception of the kind needful for artistic reaction. Again there are those who react to art and beauty in certain directions; but seem undeveloped or atrophied in others. They are like an absent minded professor of Cornell University whose mental operations had become so limited to mathematics that a student is said to have found him leaning over the parapet of the bridge above Cascadilla Gorge gazing regretfully at a round stone in his hand. He turned to the young man, distress depicted on his usually placid countenance. "I wished to measure the height of this bridge," he said, "by timing the fall of a pebble; but I, unfortunately, released my watch instead of my hold upon the stone—and the latter has no second hand. I should

like to repeat the experiment with your watch." It is credited that the student had a watch but told a lie about it, and it is also credited that this professor believed him.

Lack of properly developed perception doubtless explains why certain designers, good artists from some points of view, find it possible to repeat sizes, directions, planes of relief, values, in successive motives, apparently without distress to themselves. They might at least make a mental note of the fact that such transgressions are as painful to others of acute perception as are the discords that a child with an undeveloped ear makes by banging on the piano. Even though it be impossible for a designer through intuition to avoid the disastrous effects resulting from lack of contrast, he could reason out the matter and succeed by sheer mental effort. He could remember as a definite rule that two successive stories of a building marked in the design, not replicas one of the other and not parts of a repeating suite, will be unpleasant if treated as motives of the same height or character. There are hundreds of buildings in New York with just that fault, and many of them are by men of reputation.

I am persuaded that some of the failures to devise contrasting elements come from a perverted point of view, and this is the danger run by the "Adapters" we described month before last. Many very beautiful Italian Renaissance buildings fail in mass composition. They are beautiful in spite of it because of their charming and subtle detail, their scholarliness, their simplicity. The thoughtless "Adapter," carried away by beauty radiating from a special source, is seduced into copying faults that do not contribute to this beauty,—that mar it. He forgets the original author was a mortal like unto the rest of us and not infallible just because he lived in a century that is past. Compare the buildings of the period. Turn over

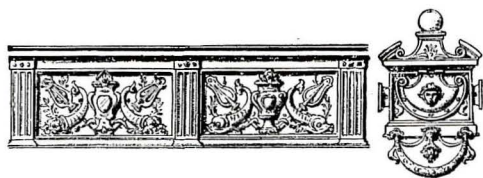


Figure 20.

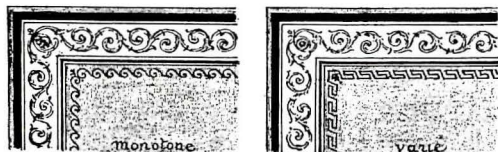


Figure 21.

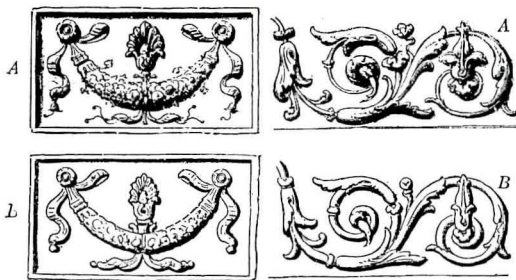


Figure 23.

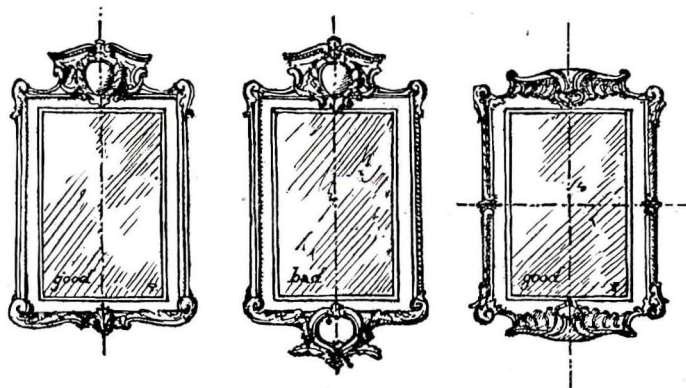


Figure 22. From "Essentials of Composition," by J. V. Van Pelt. Copyright by The Macmillan Co., 1902 and 1913.

the plates of Letarouilly and note how much more satisfying are the groupings of the Palaces of the Nari, p. 37, and Mattei-Paganica, p. 314, or the Villa di Papa Giulio, pp. 205, 214, than those of the houses on the Via del Governo Vecchio, p. 13, and Piazza della Pace, p. 23, the Curia Innocentiana, p. 57, the Palazzo Ossole, p. 61, or even the Cancelleria itself, p. 79.

Difference of story heights is only one point among a countless number of possible pitfalls that a designer must avoid. In the smaller details they crop up continually. To know the fact is not enough in this age of failure to practice what we preach. Tawney has described the "Sickness of an Acquisitive Society." The real "sickness" is the perpetration of what each individual knows to be wrong.

If these articles are to have any constructive value, that general tendency must be checked when it comes to design. We must agree with ourselves that hereafter we will keep a strict watch upon our pencil points, and never again let carelessness or a confusing "crib" lead us into violation of the simple laws of composition. Not the least of these laws is the law of "Contrast."

AMERICAN ACADEMY IN ROME.

THE monthly news letter from Mr. Gorham P. Stevens, Director of the American Academy in Rome to Mr. C. Grant LaFarge, Secretary of the Academy, is printed below.

"I have waited a day or two before writing this News Letter, so that the visit of His Majesty the King to our annual exhibition might be included. Professor Fairbanks arranged a very attractive exhibition of over 190 exhibits in four of our rooms on the ground floor. On May 4th all was in readiness—plants, flowers, casts, catalogues of exhibits, etc., and I must say that the whole looked most attractive. Ambassador Johnson and his entire staff, together with those members of the Academic Staff who were not in Greece, were on hand at half past nine. The King with three officers arrived at eight minutes to ten, eight minutes ahead of time, but we were ready for him. The King spent forty minutes at the Academy and showed much interest in the work which had been accomplished by our

students since last spring. When we came to the "Project to House the American Ambassador in Rome," His Majesty remarked to Mr. Johnson that he understood the Americans had \$650,000 to buy a permanent Embassy in Rome. Mr. Johnson was forced to reply that only \$150,000 had been appropriated by Congress for permanent Embassies in each of the big capitals of Europe. \$150,000 will hardly buy an embassy worthy of a great and powerful nation, I am sorry to say. As the Ambassador left us, his remark was that he was proud of the American Academy and that his interest in it would not cease when he sailed into the harbor of New York. The King signed our book, and we secured a number of good photographs of him, and the Ambassador. I will send you these photographs later on.

"Professor Magoffin and Professor Van Buren have gone to Greece with a party of twenty-five. They are due back about the 24th of this month, and we are planning to have an official opening of the exhibition on the 26th. It is rather late in the season to have such an opening, but we feel that as large a representation as possible from the Academy should be present. We have received enthusiastic letters from members of the Greek party. They are having a wonderful time, except that prices have increased tremendously recently, due to the Constantinian regime and the war in Asia Minor; also difficulties have arisen because a number of boats have been taken over for transport service. Everyone is agreed that it is about time Europe settled down to work.

"Landscape Architect Griswold is now the proud father of a girl baby. She was born on the anniversary of the founding of Rome, and as a consequence she has been given the middle name of Romola. Griswold is hard at work upon a fine set of drawings of the upper garden of the Villa Caprarola. Painter Ciampaglia has practically finished an interesting painting of Andromeda. Painter Lascari has started a new, big canvas, likewise a fair-sized mosaic composition. Sculptor Cecere is at work upon a group suitable for a fountain. The visiting students are a busy lot of men. Sternfeld, the Paris prize man, has a fine drawing of the Cathedral of Civita Castellana under way. Bloucke of "Tech." and Knowlton of Harvard are drawing out the

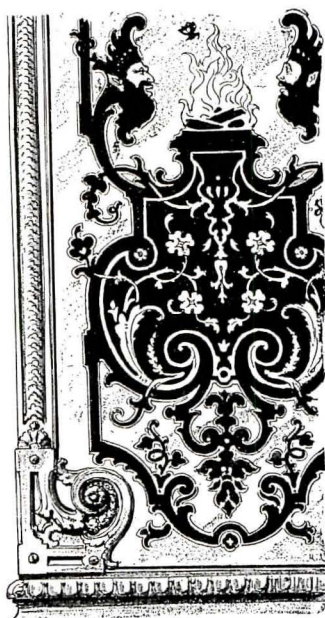


Figure 28.

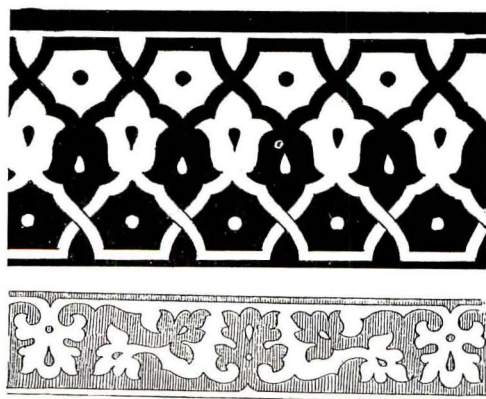


Figure 27.

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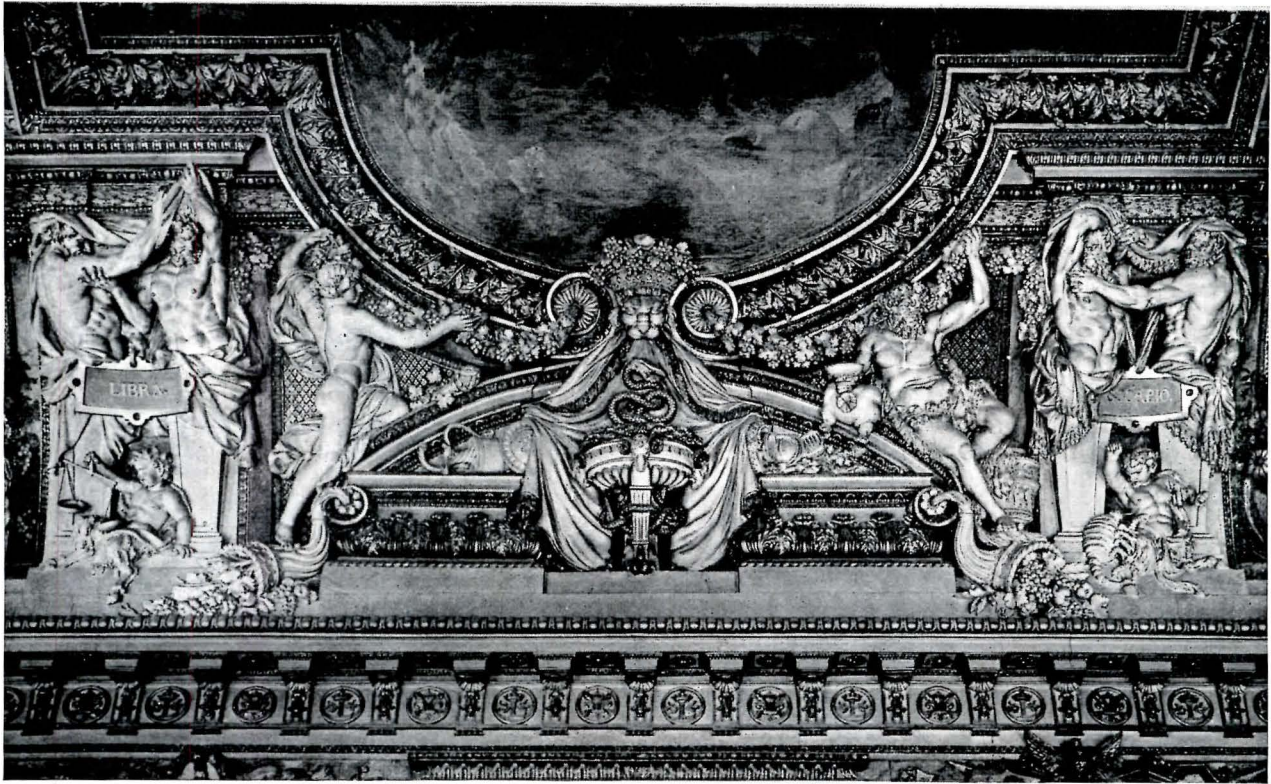


Figure 26. Details of Vault, Gallery of Apollo, The Louvre. Executed in Stucco by Girardon Under Louis XIV and Restored by Duban Under the Presidency of Louis Napoleon. From *"L'Architecture et la Décoration aux Palais du Louvre et des Tuileries."*

early Renaissance Loggia of the Church of St. Marco, Rome. Keach of "Tech." is at work upon a drawing of a famous Renaissance balcony in the Church of S. Giacomo dei Spagnoli. Hendrick of Harvard has made a complete set of drawings of the Palazzo Linotti. Rubin of the University of Pennsylvania and Skinner of Harvard are working up the Piazza del Campidoglio. Sculptor Gordon of the Pennsylvania Academy of Fine Arts has finished a group entitled "Dawn of Man" and a bas-relief of Professor McDaniel. I received a letter not long ago from former Landscape Architect Lawson stating that he is travelling in France and England with three Visiting Students who left us about three months ago. They bought a second-hand Ford at Menton and travelled through France and are planning to take the machine to England where they intend to sell it just before sailing for America. They have found this an inexpensive way of travelling and decidedly advantageous as they have been able to visit many villas in out of the way places. Former Visiting Student Rosenberg writes me that he is making a complete set of drawings of the Palazzo Davanzati at Florence. This palace is almost unique in Italy; it has been restored and furnished in the spirit of the century in which it was originally built. I beg to report that Blanchard, Landscape Architect from Harvard, has left the Academy and that we have a new arrival

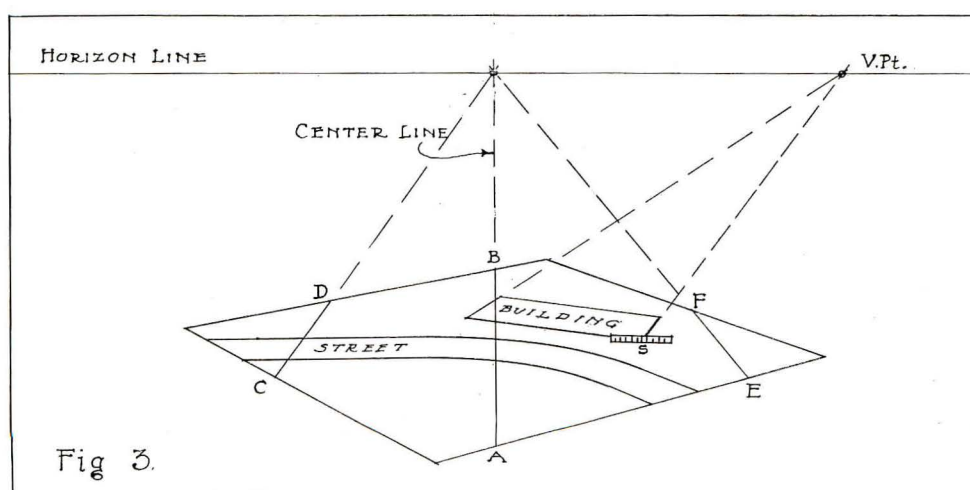
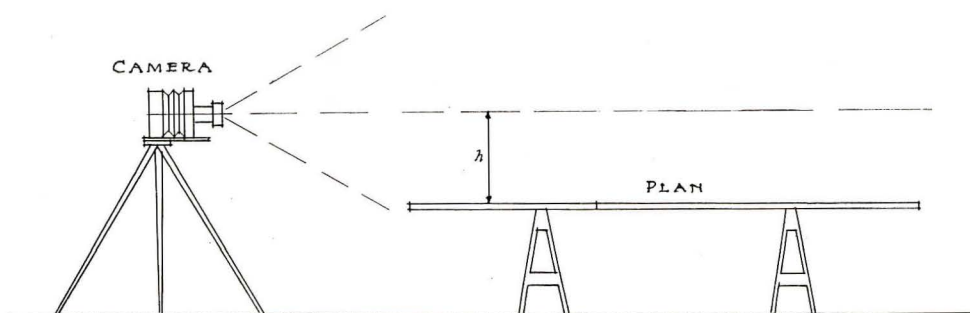
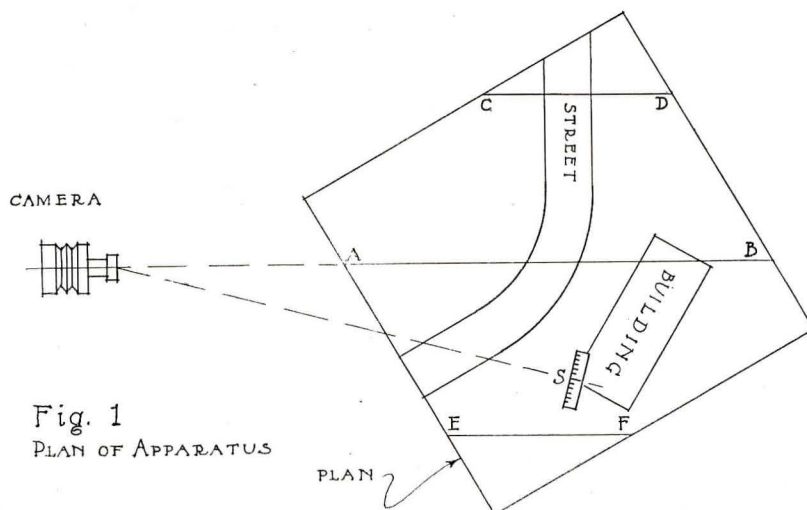
in Mr. Baker, a Stewardson fellow in Architecture from the University of Pennsylvania. Architect O'Connor has returned from Greece and left us en route for France, England and America. I hope that you will induce Mr. O'Connor to try again for the prize of Rome, for he is a splendid fellow in every respect.

"I am glad to inform you that we have had two donations. The first was a sum of 3,000 lire from Miss Agnes M. Carpenter which was given for the specific purpose of placing about 190 inscriptions and architectural fragments on the walls of the Cortile. Professor Fairbanks took charge of the work, and the result is most attractive. We likewise brought up two dozen casts from the basement and have placed them about the cortile, so that now one is enticed to walk in the arcades around the fountain.

"The second donation came from Miss Isabel A. Ballantine, who gave \$1,000 for the purchase of books for the library. This sum will help to fill many gaps.

"It may interest you to know that the exhibition of Italian Industrial Art, which it was planned to exhibit last winter in America under the auspices of the American Federation of Arts, is finally going ahead, but the material will not reach America before next November first. The Italians have finally gathered 400,000 lire, a sum which represents their portion of the expenses."

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The Photo-Perspective Plan. See Text on the opposite page.

THE PHOTO-PERSPECTIVE PLAN

BY RICHMOND K. FLETCHER

In this article Mr. Fletcher, of the firm of E. M. Parsons & Company, Architects, Boston, describes a process that he has used for a number of years and found of practical value as a time and labor saver.

IT FREQUENTLY happens that complex groups of buildings, park systems, or stretches of irregular country must be drawn in perspective, the mechanical work involved representing a large outlay of time and money. The method here described eliminates from such problems the most tedious branch of the work — that of throwing the ground plan into perspective, and being automatic also eliminates all possibility of error within its own province. Its use requires some knowledge of perspective drawing, both in securing the proper photograph and in finishing the work from the photographic perspective plan.

Very briefly the process consists of (1) photographing a plan, with plan and camera horizontal; (2) enlarging from the negative so obtained to the size of the finished drawing; (3) building up the perspective view by working on tracing paper over the perspective plan. The photographic work should be done by a professional photographer in a properly top-lighted studio.

In order to explain how the scale of the plan is translated into perspective and how the horizon line, vanishing points, etc., may be accurately obtained in the enlargement the accompanying diagrams are shown and steps in the work given in detail.

The plan to be photographed should be stretched or mounted flat and must be portable. It should be drawn in black line on a white surface and preferably should be without color or rendering. Figure 1 is a plan of the apparatus in place. The camera should have a wide-angle lens, focusing screen, and should be fitted with an 8 x 10 plate holder or larger. The plan is placed perfectly level or horizontal on a firm support. The camera should *not* be pointed down at the plan, if the finished drawing is to be done at scale, but should aim horizontally across the plan as in Figure 2. The height h of the lens above the plane of the plan depends either upon the judgment of the operator or upon a mandatory height of the actual view point which may be called for, as in the case of a competitive drawing. If a view-point is called for, five hundred feet above the ground, " h " should be measured with a yard stick, and line level so that it shall be five hundred feet at the scale of the plan, i. e., if the plan is drawn at fifty feet to the inch, " h " will be 10 inches by actual measurement. The horizontal distance from the station point to any given point on the plan may be similarly established. Of course there are physical limitations to these operations, depending upon the camera used.

Having the camera and plan in position and

with the camera aimed across the center of the plan, use the focusing screen to determine the final position of the plan. The image of the plan appears inverted on the upper part of the screen. It is easy to obtain the most advantageous position of the plan by having an assistant revolve it until a desired direction of view is obtained. Examine the image and note whether all important lines and points are clearly visible. If any are not, they may be temporarily strengthened on the plan or certain points may be marked by means of black pins. After the final position of the plan has been established, the plan must not be moved until after the photographic exposure has been made.

In Figure 1, lines AB , CD and EF are next to be drawn with soft pencil just black enough to be visible on the focusing screen. Lay a straight edge across the center of the plan, pointed toward the center of the lens. The straight edge will appear nearly vertical on the focusing screen. Adjust the straight edge until its image is exactly vertical. Draw AB against the straight edge so placed. This line becomes the center line of the perspective. Remove the straight edge and draw CD and EF parallel to AB and near the edges of the plan. CD and EF will appear on the perspective plan converging toward the top. Their intersection will locate the horizon line as will appear later.

The scale of the drawing is to be graphically shown in perspective by the following method:

Take a sheet of thin, white bristol board and cut it up into a number of pieces about 1/4-in. by 2-in. in size. On these cards mark off graphic scales at the same scale as the plan, using intervals of any convenient number of feet, the intervals to be spaced so that they will be distinguishable in the final enlargement. These scales are to be laid on the surface of the plan at important points such as corners of buildings, intersections of axes, contour lines where these are shown (as they should be on a plan showing irregular terrain) or any other leading lines. In placing each scale, be sure that it is approximately perpendicular to the sight-line between the lens and the point where the scale is placed (Figure 1-S). This is important because the scales must photograph without foreshortening. In the photograph each graphic scale will show the scale of the plan in perspective at the particular point where the scale is placed. Time will be saved in the end if plenty of these small scales are used, taking care, however, that they are so placed as not to confuse the lines of the plan.

(Continued on page 37)

PENCIL POINTS

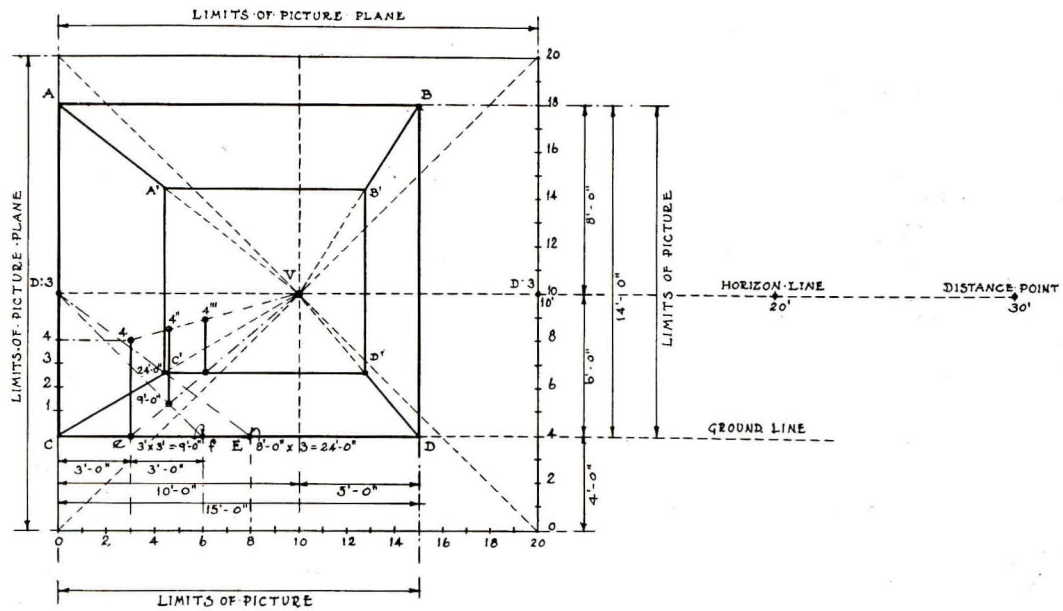


Figure 37.

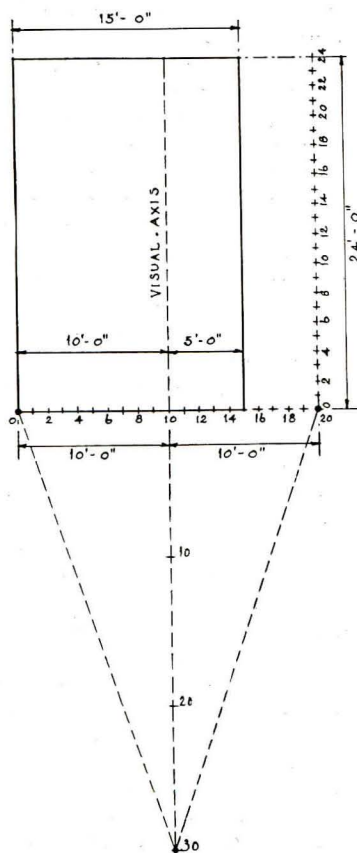


Figure 38.

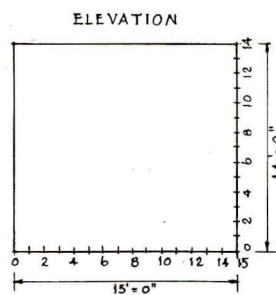


Figure 39.

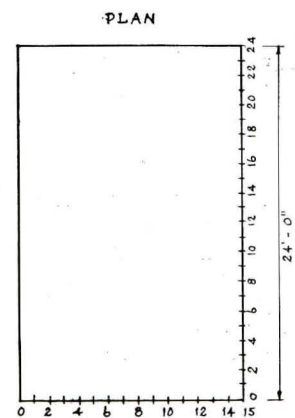


Figure 40.

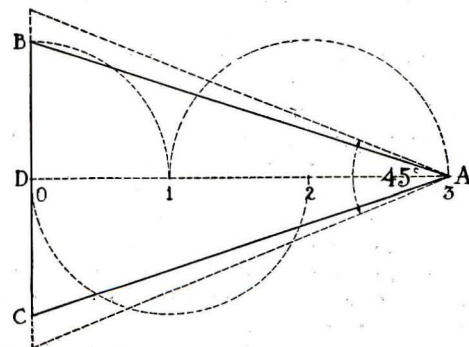


Figure 3.

Perspective Drawing (See Text on page 35)

PENCIL POINTS

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THE B.A. IN ARCHITECTURE.

From "The Charette," the monthly journal of the Pittsburgh Architectural Club.

HE IS a d—n nuisance in an office says the architect. The graduate is not in a position to say anything but since he demands a salary he says in effect, "I am not."

The debate is interesting.

That he is, to some extent, is well known in every office. He is inexperienced in practical building and therefore in practical design—the two are inseparable; he carries frequently more side than the office can stomach; he is rarely an accomplished draftsman to whose hands anything that turns up can be satisfactory entrusted, for his training has not been perfectly balanced and his sphere of activity is therefore somewhat limited; and last but not far from least he expects compensation out of proportion to his actual economic value.

An architect's office must primarily be profitable in order to continue to be an architect's office—an important point—and each unit of the organization must contribute to that profit. In so far as the B.A. cannot fit in to this inescapable scheme of things he is a nuisance, but a broader view forces one to question the justice of stressing the charge.

A baby is a nuisance. He requires much of sacrifice and causes much disturbance and inconvenience for his guiding spirits. He has very disturbing ideas and distinctive points of view on many things and he is inexorable in his demands. But the weary parent was once just such another nuisance and another guiding spirit served his need and led him up to manhood and the world's work, a service for which he can pay only in kind.

And so in common justice the architect must stand "in loco parentis" and help the architectural baby in his tender beginnings and metaphorically wipe his little architectural nose and teach him to say "that" instead of "that there" and not to split his infinitives.

The architect was also once a "young beginner" and though he has forgotten, even he was not launched forth in his profession equipped with all knowledge and perfectly balanced judgment. He, too, swaggered without just cause, blundered gloriously, did bad work and was generally an unprofitable unit; but he learned by experience and grew with his work until he became the marvel of imagination, the paragon of efficiency and the main stay of the profession he esteems himself in his maturity.

Even thus will the novice of today develop under sympathetic guidance and in the process more than reward the tolerant and understanding "chief," for whatever sacrifice of time and treasure he may lay upon the Altar of Youth.

And the office that can not find a place for nor make

good use of the joyous enthusiasm, the debonair freedom from tradition and the fresh imagination of Youth to its own profit is one from which little can be expected architecturally; its work perpetually dedicated to the safe and sane, revealing no trace of that vital element of originality upon which the ultimate salvation of the practice of architecture as a fine art inevitably depends.

GET A GREEN CARD.—Adv.

THE CINCINNATI ARCHITECTURAL SOCIETY.

THE Cincinnati Architectural Society brought its year's class work to a close in May with a design competition for a proposed club house for the Avon Hills Golf Club, of Cincinnati, which is an organization open to the public and under the auspices of the Board of Park Commissioners. The Park Commission assisted in preparing the program and judging the drawings, and the golf club joined in the donation of the prizes. The first prize of \$30.00 was won by Earl H. Carlton, the second prize of \$20.00 by Lawrence J. Lefkin, and third prize, \$10.00, by Oscar E. Friedhof. Mentions were awarded to George F. Frankenberger, H. E. Henthorn, and Joseph Hautman.

Recent meetings of the society have been addressed by Mr. Richard E. Grant, landscape architect, on "The Cloisters of France," and by Mr. Edward Kruckemeyer, architect, on recent travels through Spain, Italy, France and England.

It is planned to have a series of outdoor sketching classes during the summer months and a continuance of the Beaux-Arts program in the fall.

GET A GREEN CARD.—Adv.

PERSONALS

WILLIAM ALBERT SWASEY, Architect, has removed his offices to the Gotham Bank Building, Columbus Circle, New York City.

WILLIAM LAWRENCE BOTTOMLEY AND ARTHUR PAUL HESS, Architects, have removed their office to 112 East 55th Street, New York City.

LEE WILKINSON has opened an office in Washington, D. C., and will specialize in hospitals and schools. Mr. Wilkinson resigned recently from the Construction Section of Public Health Service. During the war Mr. Wilkinson was Specification Writer under Mr. McNeille, in the Hospital Division of the General Engineer Depot and also instructor of Mechanical and Topographical Drafting in evening classes at Washington Barracks, for the First Engineer Training Regiment, having enlisted from New York where he received his architectural training.

RAYMOND W. JEWELL AND M. BEEMAN STOUT have formed a partnership for the practice of architecture under the firm name of Jewell & Stout, with offices at 1108 Press Building, Binghamton, N. Y. Mr. Jewell has been established at that address for a number of years as an architect, specializing in school houses. Mr. Stout has been connected with architectural offices in New York City for sixteen years and for the last six years has served as Patron for Syracuse University, with the Beaux-Arts Institute of Design.

JAMES M. GAGEN, Electrical Engineer, and ELVIN J. BECKER, Civil Engineer, have joined in establishing the firm of Gagen & Becker, electrical contractors and engineers, with offices at 750 West 181st Street, New York City. Mr. Gagen was founder and president of Gagen & Butler, Inc., from which position he recently resigned, while Mr. Becker has been engaged for fifteen years on large engineering and construction operations.

J. W. LEIGH, Architect, has removed his office to Suite 2090, Railway Exchange, St. Louis, Mo.

PENCIL POINTS



EUGENE F. SAVAGE.

EUGENE F. SAVAGE, who won the Medal of Honor in Painting at the recent Exhibition of The Architectural League of New York, was born in Covington, Indiana, in 1883. He began his studies at the Corcoran Art Gallery, Washington, D. C., and continued them at the Art Institute of Chicago. He also attended the Academy of Fine Arts in Chicago. He won a Fellowship in the American Academy in Rome for 1912-15.

During his travels abroad he studied at Munich. Aside from the great influence of the historic work of Italy and of China. Mr. Savage counts as the most important factor in his artistic development the contact with men who had studied under George De Forest Brush. It was through the influence of Mr. Brush that he came to realize the relation of form to a two-dimensional, patterned surface—to understand just what being limited to two dimensions means to a painter.

Mr. Savage devotes himself to mural painting. He is a member of the National Society of Mural Painters and lives at Ossining, N. Y. A figure study by Mr. Savage was reproduced on a plate page of the issue of this journal for June.

THE PHOTO-PERSPECTIVE PLAN.

(Continued from page 33)

Now make the exposure, avoiding vibration of the camera and plan so as to prevent blurring of the lines. The negative should show clearly the details of the plan. Next have the photographer make a bromide enlargement, the width of which will be determined by the desired width of the finished perspective. It is sometimes desirable to have more than one trial negative in order to finally determine the most advantageous direction of the view.

Having obtained the enlarged print, stretch it along the lower edge of a drawing table with the center line perpendicular to the edge of the table, and over it stretch transparent tracing paper or cloth. Figure 3 represents the enlargement in place on the drawing table. To locate the horizon line, prolong lines *CD* and *EF* (3) and draw the horizon line through their intersection and perpendicular to the center line *AB*. You can now establish vanishing points for each system of parallels by prolonging one line of each system until it intersects the horizon line. Proceed to erect elevations by using your horizon-

tal graphic scales. The vertical distance at any point will be equal to a like horizontal distance as shown by graphic scale at that point. After determining a vertical height at any scale point, it may be carried to any part of the drawing by means of vanishing lines. The smoothness with which this part of the work goes on will depend naturally upon the knowledge and ingenuity of the draftsman, but with the plan completely visible in perspective and all necessary vanishing points obtained, it should be a comparatively simple matter to complete the work.

If it should be desired to use this method to lay out a perspective having a view point near the ground level, it will be necessary to obtain a "submerged" perspective plan, as for a birdseye, and then to erect all points to their required elevations. If the camera should be used at a level too close to that of the plan, the lines of the plan would themselves foreshorten so that all cross lines would nearly or entirely disappear on the photograph.

When this process is once understood by the draftsman and the photographer knows what he is expected to do, it should not require more than half an hour of the draftsman's time in the studio for one operation. It requires a day or so to obtain the enlargement after the negative is made, but this delay and the small expense of the photography are quite negligible as compared with the time required to reach the same result by the usual complicated geometrical process.

The process has been in use by the author for a number of years.

(Continued on page 42)

Below is shown at reduced size the announcement of the recent outing of The Cincinnati Architectural Society. Blue-print, 10 3/4 x 6 1/8 in.

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QUERIES

In this department PENCIL POINTS will endeavor to answer questions of general interest pertaining to Architecture and allied arts, giving the best available information from authoritative sources. We desire that you feel free at all times to make use of this service, inviting your co-operation in making the department both interesting and valuable. Should you desire an answer by mail, enclose stamp for reply. Address queries to, PENCIL POINTS, (Attention of E. M. Urband), Metropolitan Tower, New York City.

Question—I would be pleased to know the publishers of Pond's "Engineering for Architects" and Burt's "Steel Construction." J. F. B., Albuquerque, N. M. **Answer**—We find that Pond's "Engineering for Architects," by DeWitt Clinton Pond, was published by the Columbia University Press, 1915, and a copy can be obtained by direct inquiry to them. Burt's "Steel Construction" books are reference books covering the design of steel framework and buildings, and were published by the American Engineering Society, 1914.

Question—Would you kindly inform me of publications (books, magazines or pamphlets, etc.) dealing with reinforced concrete as applied to church architecture? A. W. B., New York City. **Answer**—We find that there are fragmentary allusions to reinforced concrete for church buildings, which treat the subject in a general way. Much information can be obtained from booklets furnished by the various cement manufacturers.

Question—Can you furnish me with the titles and names of publishers of a few of the best known and most thorough texts in English on linear perspective? Also is there an English translation of the "Manuel de Perspective et Trace des Ombres," by P. Planat? **Answer**—We herewith submit some titles of text books in English on perspective: "Perspective Drawing," Ben J. Lupsch; "Architectural Perspective," by F. O. Ferguson, 1903, C. Lockwood & Son, London, publishers; "Perspective for Beginners," by George Pyne, 1906, C. Lockwood & Son, London, publishers; "Modern Perspective," by W. R. Ware, Macmillan Co., 1905; "The Principles and Practice of Linear Perspective," published by N. W. Henley & Co., 1901; "Linear Perspective for the Use of Schools," by Richard Burchette, Chapman & Hall, publishers, 1878. We are unable to find a translation of the "Manuel de Perspective et Trace des Ombres," by P. Planat.

Question—Can you give me some information as to where books on bungalows and bungalow construction can be obtained? **Answer**—The *Architectural Record* has run a series of articles by J. T. Boyd on some principles of small house design, with illustrations and text, Vol. 47, p. 58-75, 132-153, 232-264, 290-322, 436-455, 482-500; Vol. 48, p. 242-256. *The Builders' Journal*, published by the Rogers and Manson Co., 132 Berkeley St., Boston, Mass., shows complete plans of small houses and construction details. We also submit "Bungalows, Camps, and Mountain Houses," published by W. T. Comstock, 23 Warren St., New York City.

Question—Kindly mail me prices and descriptions of any books you handle on church architecture. **Answer**—We do not handle any books on church architecture, but our classified catalogue of available early issues of *The Architectural Review* contains references to church work, under the titles "American Churches" and "Modern English Churches." Kidder's "Handbook of Architecture—Churches and Chapels," published by W. T. Comstock, 1906; "American Churches," published by *The American Architect*, 1915, 2 Vols. with introduction by R. A. Cram;

"Church Planning in the United States, Its Growth and Present Needs," by R. F. Bach, *The Architectural Record*, 1916, Vol. 40, p. 15-29, 145-162, 223-243, 455-477; "The New Country Church Building," by Brunner, Library of Christian Progress.

Question—Please inform me if you have a collection of pictures of medium sized Christian Science Churches, or if same can be had, and approximate price? F. T. J., Dallas, Texas. **Answer**—The material available does not afford pictures, but we submit herewith the following references that will prove useful in the planning and designing of such churches: Vol. 41 of *The Architectural Record*, p. 195-209, gives information concerning the First Church of Christ Scientist, at Rochester; Vol. 46, "Some Principles of Design and Construction in Church Building," p. 115-132; Vol. 47, Church Plans, p. 85-183-185; Vol. 40, p. 15-29, 145-162, 223-243, 455-478, 529-540, "Church Planning in the United States," by Richard F. Bach.

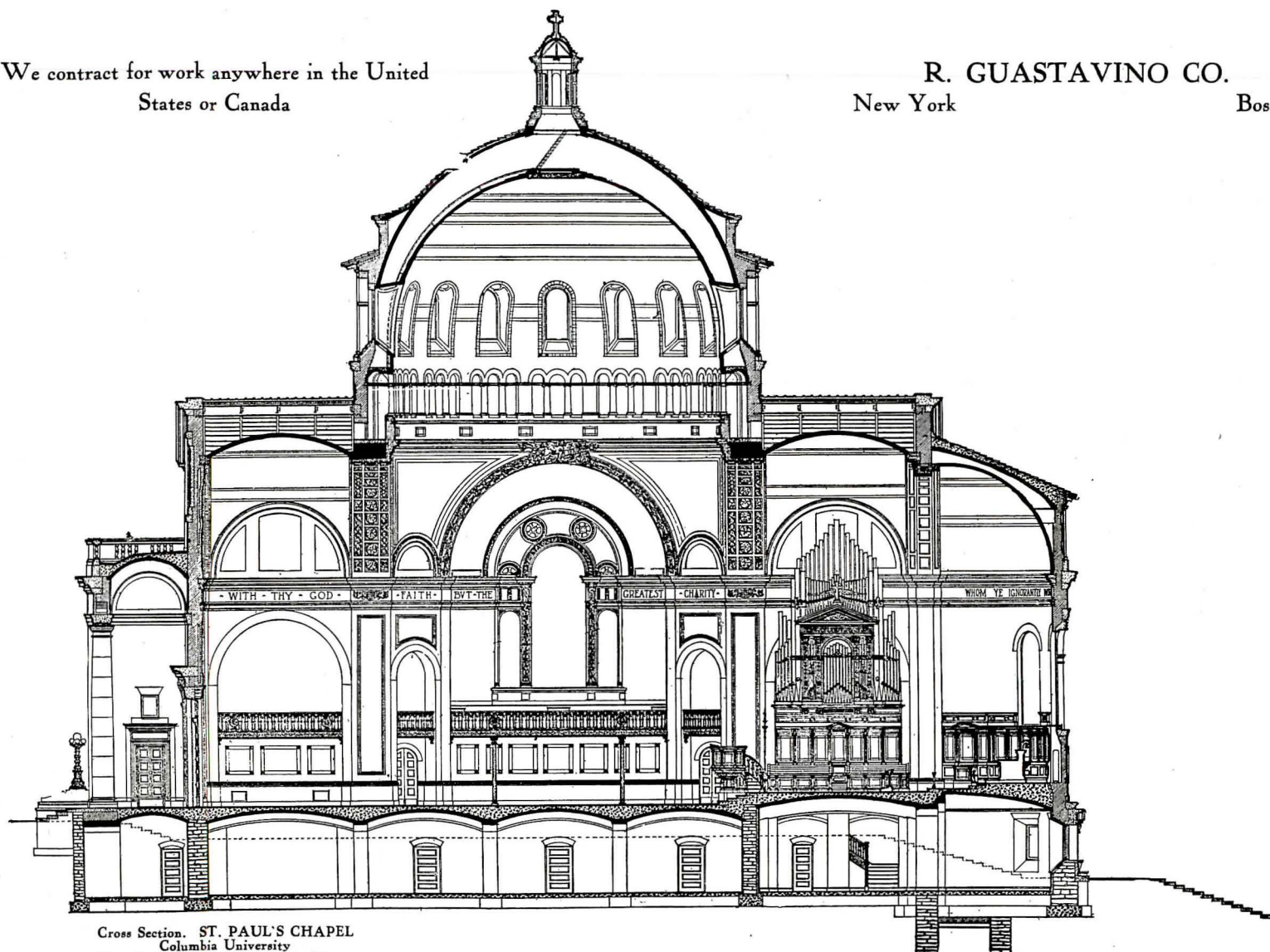
Question—Do you know of a suitable text for architectural students on the History of Art? Also a beginners' book on Pen-and-Ink that is not out of print, and one for water color rendering? M. L. F., Agricultural College, Miss. **Answer**—For text for architectural students on the History of Art, we refer you to "Ancient Art" and the "History of Mediaeval Art" by Franz Von Reber, the first costing \$3.50 and the second \$5.00. Both are published by the W. T. Comstock Co., 23 Warren St., New York City. For renderings in pen-and-ink, we would suggest Frank Allison Hays' "Rendering in Pen-and-Ink," price \$2.40, published by the Architectural Book Publishing Co., 31 East 12th St., New York City. "Pen Drawing," by McGinnis, is also an excellent book, and can be obtained from above book publishers. There are not many books on rendering. "The Wash Method of Handling Water Colors" by Frederick can be obtained from the W. T. Comstock Co. Mr. H. Van Buren Magonigle, architect, is now publishing a book on "Architectural Rendering" which is still on the press.

Question—Do you know of any work treating the architecture of the Synagogue? M. P. H., Columbus, Ohio. **Answer**—We submit the following list of references, which we hope will be useful to you: Wirth, Zdneulk, "La Richesse d'Art de la Boheme," Prague, 1913, 1 volume; *Builder*, Vol. 35, 1878, p. 512, text 510; Vol. 37, page 859, Vol. 50, year 1886, Vol. 38, page 638-639, 633-634, Vol. 40, p. 276-278.

Question—Will you kindly inform me of a first-class architectural school in Cleveland, Ohio. One that will teach Perspective, Free Hand, Ink Rendering, Shadows, etc., Structural Engineering, and any other subject that appertains to architectural work? J. F. B., Woodlawn, Pa. **Answer**—The only reference we have of a school of architecture in Cleveland, Ohio, that teaches these subjects is the John Huntington Polytechnic Institute, 2032 Euclid Avenue, Cleveland, Ohio. This has five instructors, the tuition is free and the enrollment is approximately 104.

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PENCIL POINTS

SKETCHING AND RENDERING IN PENCIL

(Continued from page 10)

selected and the materials prepared, make yourself as comfortable as circumstances permit, in order to have your attention free for the task at hand. In this connection another suggestion may prove worth mentioning and this is that a newspaper or magazine makes a fairly comfortable seat on the ground or on some stone or log or wall, if no better one is available.

When all is in readiness, proceed with your sketch, blocking in the main proportion slightly, indicating also the lines of the trunk and principal branches. Observation will prove that the contour of a tree is seldom as round as we sometimes imagine, in fact, the general mass of most trees can be bounded by an outline made up largely or wholly of straight strokes. When starting a sketch remember this fact. Then, once this outline and the main subdivisions have been quite definitely established, begin the shading, considering carefully the direction of the light, studying the subject through partly closed eyes in order to eliminate the less essential values, remembering the impossibility of drawing every leaf and twig. Some foliage masses seem very sharp and clean-cut against the sky while others soften gradually into the surroundings, so it is necessary to choose the type of line best suited to the conditions at hand. This choice depends partly on the individuality of the artist and the time available but mainly on the characteristics of the foliage itself. The line which would nicely suggest the leafage of the willow might fail, for instance, to represent the individuality of the pine. The sketches at "1" at the top of Figure 31 show a number of ways of building up foliage tone, while at "5" sketches "B," "C," "D" and "E" show different methods of representing similar masses. This variety of strokes should make it plain to the student that there is no set manner of working. Consequently sketch the objects before you in what seems the most natural way, and if the results are not satisfactory try again using some other kind of strokes. The type of line employed is of less importance than are the values themselves, for if these are carefully worked out the tree will seem properly modelled to give a sense of depth and projection. Use care, too, in suggesting the roundness of the branches and trunk, noting the great difference in the tone of the bark in sunshine and in shade. The shadows cast by the various branches on one another are worthy of special attention as are also those cast by each tree on the ground and on surrounding trees or buildings, in fact, so far as architectural purposes are concerned, it is most essential to be familiar with tree shadows as they appear when falling on the walls or roofs of buildings and on the lawns and sidewalks.

Because of the many difficulties encountered when drawing entire trees it is often well to sketch first of all certain portions only, making studies somewhat similar to "2," "3" and "5A," Figure 31. After a number of these have been done it is time to attempt complete single trees such as those on Figure 32, adding a bit of the surroundings if you choose. Later try groups of two or more trees, as indicated at "1," Figure 33. This sort of work is most important, but neither should hedges and bushes and grass be neglected, so make some studies similar to "2A," Figure 33, and even some of rocks and ledges such as those at "2" and "5F," Figure 31, and "2B," Figure 33, for though these cannot be classified under the term "foliage" they can be studied to advantage at this time. It is not enough to sketch nearby trees, but those in the distance should be done as well. Sketch 3, Figure 33, showing the simplicity which is often found in far away foliage. It is sometimes advisable to draw the same tree from both near at hand and from the distance, and it is also beneficial to sketch it at different seasons of the year, for it is in the winter when the leaves are gone that the best opportunity is presented for studying the tree "skeleton." If the winter proves too cold for outdoor work several photographs might be taken to be sketched later,—the first when the limbs are bare and

others in the spring, showing the leafage at various stages in its development. During all of this study and sketching try to memorize the leading characteristics, for by so doing you will build a firm foundation for future memory work. It might be well, in closing, to point out the desirability of preserving all such sketches, for no matter how incomplete or imperfect they may seem, when foliage is required in later renderings they will offer many suggestions of great value, for the only real difference between the work from nature and that done in architectural rendering is that in the case of the latter the foliage is made rather inconspicuous and is also in many cases given a more conventional handling.

At "4," Figure 33, are shown six "thumb nail" sketches of the same house done from the imagination, each with a distinctive foliage treatment. These show only a few of numerous possible schemes which could be devised by the student to meet similar conditions, but in order to successfully develop any of them at large scale the kind of knowledge gained from outdoor work would be of great help. It is suggested, then, that the student make the most of his opportunities during these summer months to store up this knowledge which will then be his to draw upon as it is needed in the future.

PERSPECTIVE DRAWING

(Continued from page 35)

Wishing to find the second unit at a depth of 9'-0", proceed as usual, mark off 3'-0" to the right of point *e* on the ground line and from this point *f* conduct a straight line to the reduced distance point $D \div 3$ in the opposite direction as shown (Figure 37) and at the intersection of this line $fD \div 3$ and line *CV* we will find exactly a depth of 3' \times 3' or 9'-0". From the top of the first unit or line *c4'* conduct a straight line to the vision point *V* and raising a vertical from the foot of the unit just found at a depth of 9'-0" we shall find point 4", thus completing the second unit. The finding of the third unit is a very simple matter and is clearly shown in the diagram (Figure 37).

GET A GREEN CARD.—*Adv.*

THE ARCHITECTURAL LEAGUE OF INDIANAPOLIS.

THE Architectural League of Indianapolis has voted to transfer its strength and efforts to the Indiana Artists' Club, thereby consolidating two organizations having similar aims and ideals.

The address of this organization has been changed to 412 Traction Terminal Building, Indianapolis, Ind.

Through this new affiliation they will be prepared to continue the work of the old organization.

CORNELL ARCHITECTS' BOAT RIDE.

THE Cornell University Architects' boat-ride this year was to Taughannock Falls. It took place on May 31st. Faculty members and undergraduates turned out enthusiastically. The seniors had the highest percentage of attendance. A lively ball game was a feature of the event.

THE Metropolitan Museum of Art has recently put on view a number of interesting examples of metal work, consisting of grates, andirons, knockers, door hardware, fan and side lights, etc. This metal work is in Gallery H-22. Also three notable tapestries representing History of the Sabines have been put on view. These tapestries are in the north end of the Armour Gallery.

THE SPECIFICATION DESK

A Department for Specification Writers

WHAT THE SPECIFICATION WRITER WANTS TO KNOW.

By LOUIS R. HOLSKE.

Finishing Hardware—In considering the finishing hardware for any building, the architect will naturally approach it from the æsthetic side. He will decide whether the trim of the door hardware is to be the sectional type, i.e., as a separate rose and escutcheon, or the combined rose and escutcheon type, i.e., a plate having on it both rose and escutcheon. He will decide also the metal to be used in the trim, which in good work should always be bronze, the finish to be given the metal, and the size and form of knob and other trim. With the above items settled he will consider the hardware in detail. First discussing the butts, will they be American or French form, fast or loose-pin, steel-bushed or ball-bearing, of bronze metal or merely bronze plated, or of cast or malleable iron, with steel washers, for painting. He will insist, of course, that butts for exterior work be of bronze metal and that those for casement and transom sash be fast-pin type. He may permit butts for interior work to be steel, bronze plated, but he will insist that they be ball-bearing. Considering the hardware for exterior features he will want to see the proposed equipment for double-hung windows. The type of sash-lift, whether flush or bar, the type of sash-fast and socket for control of the upper sash, if a socket is to be used. He will want to see the equipment for casement and pivot windows and transom sash. What type of adjuster is proposed for casements and what lock, a mortise bolt or turnbuckle applied in the face of the sash? For pivoted sash, points to be examined are the construction of the pivot and the type of catch or lock and the adjuster. For transom sash, the catch and lift, or if operation is to be by pole, the size of the chain used for the stay are to be looked into. For exterior doors, what is the type of lock proposed to be used? A mortise cylinder lock having spring and dead bolts for main entrance doors should be insisted upon, but a three (3) tumbler bit key lock may be accepted for other doors, provided they are equipped in addition with an independent mortise bolt. In the selection of the type of lock for interior doors, either cylinder of bit key, the architect will usually be governed by cost, which will indicate a bit-key lock, the cylinder being more expensive. He may, however, insist on certain doors being equipped with cylinder locks for the added security. The market affords quite a variety of locks and latches with various functions. Care should be exercised in selecting for each door the lock or latch which will best give the control of that particular door. The lock or latch should be carefully examined. The case should be of cast iron, substantial in character, and the strike, front, bolts and hub of bronze. The hub should have a bearing on the case to prevent rocking of the spindle. For the same reason the rose should be what is known in the trade as "bracket bearing," i.e., the stem of the knob is shouldered, the main stem entering the rose, the shoulder resting on the top of the rose. The case should be opened and the mechanism of the lock examined and the decision governed by the character of the workmanship displayed. If the parts are found to be carefully made and well finished, the lock may be selected, but if the parts are found to be very rough and poorly finished, giving evidence of careless manufacture, it should be rejected. As a general principle one should expect to find in the case as little cast iron or steel as is possible to do with. It should be limited to tumblers with actuating spring and to levers controlling the spring bolt: All spiral springs should be of phosphor bronze or brass. The architect will examine with equal care all other hardware items proposed to be used such as bolts, door stops, checks and closers, sash adjusters, transom operators, etc.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITERS.

Any publication mentioned under this heading will be sent free, upon request, to readers of PENCIL POINTS by the firm issuing the publication.

The Complete Line—A complete handbook for the specification writer and the man on the job is this booklet issued by The United States Radiator Co., Detroit, Mich. It contains illustrations of various heating units, and also gives by tables and drawings information regarding them, which is of practical use to the architectural office. This handbook measures $4\frac{1}{2} \times 7\frac{1}{4}$ inches and contains 258 pages.

American Walnut—*The Choice of the Master Craftsman*—A brochure containing excellent illustrations of early carved work in walnut, with an outline of its use by craftsmen, and offers information regarding veneers. The illustrations show types of figured panel surfaces that are obtainable, in the wood, and the text tells of walnut types, natural formations, and logging processes, all interesting and valuable information. The brochure contains forty-eight pages and measures 7×9 inches. It is published by The American Walnut Manufacturers' Association, 616 South Michigan Blvd., Chicago, Ill.

Koll's Patent—In order to place before the field an adequate description of their lock-joint wood column, this forty-eight page booklet has been published by the Hartmann-Sanders Company. The photographic illustrations show many classic types of columns and pilasters, which are available for use. The size of the booklet is $7\frac{1}{4} \times 10\frac{1}{8}$ inches. Published by the Hartmann-Sanders Co., Elston and Webster Ave., Chicago, Ill.

Fireproof Construction—In a booklet, illustrated and with text on metal lath, the Northwestern Expanded Metal Co., 37 West Van Buren St., Chicago, Ill., explains the various types of construction into which Knoburn can be built as fireproof construction. The illustrations and scale drawings show sections through construction of exterior walls, floors and suspended ceilings.

Sargent Book of Designs—To assist the architect in carrying out the scheme of design in hardware for his building, Sargent & Company, New Haven, Conn., have issued this little 76-page booklet, size $5\frac{1}{4} \times 9\frac{1}{4}$ inches. It contains illustrations of locks, knobs and escutcheons and one illustration of the interior of the cylinder showing operation of the lock.

Tapestry Brick Work—Artistic Brickwork, its achievements and possibilities, is an interesting article concerning this building material, and the photographic illustrations show a few of the monuments left through the ages to show the possibility of brickwork as a decorative building material. Bonds and jointing are treated in another article with text and illustration, and some specification notes with tables of brick dimensions and formulae for mortar mixing for tapestry brick-work. This booklet, $8 \times 10\frac{1}{2}$ inches, containing 48 pages, is published by Fiske & Company, 30 Franklin St., Boston, Mass.

Letters on Wood-Finishing—The Architectural Service Department of Pratt & Lambert have printed a series of letters setting forth in simple language wood-finishing lore. They are bound in a book, $8\frac{1}{2} \times 11$ inches, containing 18 pages. The series describes the characteristics of the stains, sponging effects, finish, fillers, harmony, etc. Published by the Pratt & Lambert Co., Buffalo, N. Y.

Measuring Tapes and Rules of Every Description—Catalog Number Ten, issued by The Lufkin Rule Co., Saginaw, Mich., contains illustrations and descriptions of tapes and rules showing various types for architects, engineers, surveyors. Measuring tools for mechanics such as gages, protractors, etc. The booklet measures 6×9 inches and contains 122 pages.

GIACOMO BAROZZI DA VIGNOLA.

(Continued from page 24)

Vignola. The main building was built in three years; the landscape work was done between 1553 and 1555.

The Caprarolo Palace is the most beautiful and stately work of Vignola. Cardinal Allesandro Farnese selected a solitary situation about thirty miles from Rome, in a mountainous and desolate place. The edifice stands on the ridge of a hill, surrounded by rocks and in a kind of defile, it forms an amphitheatre which presents itself most agreeably to those who approach and it commands a fine view.

Vignola died at the age of sixty-six and was buried in the Pantheon with great pomp by the members of the Academy of Drawing. Among his works are the Caprarolo of Viterbo, the Jesuit Church (Il Gesù) in Rome, begun in 1568, a Baroque type of church, two near cupolas of St. Peter's, alteration of the Portico di Banchi at Bologna, Casa Bocchi-Piella, 1545, the Palazzo Isolani at Minervio, Casa Tarugi in Monte-Pulciano, Palazzo Farnese in Piacenza and many others, in addition to his work at the Villas Papa Giulio, Lante and Farnese.

THE PHOTO-PERSPECTIVE PLAN

(Continued from page 37)

ber of years and has been of great value as a time and labor saver. Its value as such naturally increases with the complexity and irregularities of the ground plan. It is a practical method—not a theory—and any draftsman of average skill in perspective should be able to handle it, provided the proper facilities are at hand.

THE AMERICAN ACADEMY IN ROME, WINNERS IN THE COMPETITION FOR FELLOWSHIP

THE winners have just been selected in the annual competition instituted by the American Academy in Rome. Three fellowships were awarded, one in architecture, one in painting and one in sculpture. Each is of the value of \$1,000 a year, for three years, during which period the recipient resides at the Academy in Rome, with certain liberal allowances of time for travel.

The fellowship in architecture this year has been awarded to V. L. S. Hafner, of New York, a student of the Boston Architectural Club and the Massachusetts Institute of Technology. As a further qualification he presented himself as the winner of the second prize in the Rotch Travelling Scholarship competition in 1920 and 1921. He entered the Academy's competition at Columbia University. It involves always a preliminary and a final competition. The subject for the first was a country school for boys, near an old fashioned New England village. The final problem was a group of buildings for a university of the first class.

Frank H. Schwarz, of New York City, who has studied in the art schools of Chicago and entered the competition at the National Academy of Design here, has won the fellowship in painting. His subject was a tribute to heroism. The same subject was set for the fellowship in sculpture, awarded to Edmond R. Amateis. Born in Rome but now an American citizen, living in New York, this artist entered the competition at the National Academy of Design. He has been a student there, at the Academie Julien, at the League and at the Beaux-Arts Institute of Design.

THE ARCHITECTURAL CLUB OF NEW HAVEN

THE Architectural Club of New Haven (Connecticut) held an important meeting at its clubrooms on Chapel Street on Tuesday evening. President Theodore O. Appel presided. There was a large attendance of the officers and members. A revision of the by-laws was thoroughly discussed and some changes were made in order to make provision for the rapid growth and future welfare of the club. An article was included in the by-laws providing for admission to active membership of non-resident architects. This will, no doubt, bring into the club representatives from other Connecticut cities, especially from Bridgeport and Waterbury. Hartford already has representatives on the membership and will probably contribute more. The subject of the club's outings was considered. Provision was made for the recreation of the members for the summer months. Plans for next years exhibition were formulated and an additional committee was provided, of which Mr. A. W. Boylen is chairman.



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